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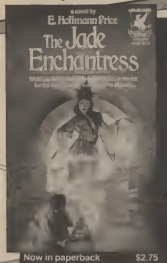
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Vol. 6 No. 6 (whole no. 53) June 1982

Next issue on sale June 8, 1982



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EDITORIAL: BUT WE'RE THE GOOD GUYS!

by Isaac Asimov

photo: Roy Schneider



I'm a methodical, prudent sort of person and like to lead a quiet and orderly life. Oh, I'm loud and noisy at conventions and jump around a lot and manage to kiss and hug every young woman in sight, but I don't drink, smoke, gamble, or stay up late nights, and when I'm not at conventions, I tend to stay quietly at my typewriter and let the world pass me by, with my blinds drawn and a healing silence about me.

That is why I am glad that I don't seem to have any bitter enemies, or to be a serious object of controversy. Most people seem to think of me as "the Good Doctor" and find no reason to denounce me. It contributes helpfully to that quiet life I mentioned.

Of course, I take firm stands in my editorials and on other soapboxes, but I like to think that however eloquent I get, I don't get rancorous or nasty.

Therefore, when people disagree with me, they tend to denounce my *views* rather than me, and that's all right. Sometimes, of course, I am denounced for having an ego the size of Los Angeles, but I just put that down to hyperbole. Actually, it's only the size of the Empire State Building.

And yet, human nature being what it is, I sometimes secretly long to be denounced for something ridiculous. I can't help but think how amusing it would be to be the object of foolish rhetoric—along with other people, of course, as I wouldn't want to be alone in this.

Well, it's happened.

Apparently there is some sort of organization that is devoted to the development of fusion energy as a solution for the world's ills. I sympathize with that. I want to see controlled fusion demonstrated

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in the laboratory, developed on a large scale, and put to work supplying Earth with a major portion of its energy requirements.

The organization I am thinking of, however, is apparently not content with that. They see conspiracies designed to prevent fusion power from being developed.

Are you worried about overpopulation and declining resources? Aha, you are trying to brainwash humanity into thinking there are no solutions and that all is hopeless.

Are you in favor of searching into the possibility of extraterrestrial life? Oho, you are trying to brainwash humanity into thinking they are helpless pawns in the face of superior intelligence.

Are you in favor of solar power satellites in space? There you are, trying to deflect attention from fusion power.

Are you in favor of fusion power? Don't kid me; you're lying.

Apparently, there is a monthly magazine put out by these misguided enthusiasts, the name of which I won't give you because it would be ridiculous to do them the favor of publicizing them.

A loyal reader of *IA'sfm* came across an article from a recent issue of this magazine and was kind enough to send me a Xerox copy. The title is "There's No Science in Science Fiction," but that in itself didn't bother me. I have often maintained there is no science in some science fiction.

In reading through the article, however, I found that what the author meant was that science fiction writers were involved in a conspiracy to convince humanity that it was helpless in the face of incomprehensible technology and superior extraterrestrial intelligences. We were, in fact, trying to enslave humanity to a small elite of technologists.

Are we really doing this, for goodness sake? Since when? According to the author, the real villains are "British-centered ideologues . . . who also built the international drug trade . . . and who exported the rock-drug-pornography counterculture and the environmentalist movement to America's shores."

Obviously, we're working our way up to a climax. These British devils are responsible for drugs and, far worse, pornography, and far, far worse still (gasp) environmentalism.

What's more, "science fiction was developed and foisted on America's young people by a few well-financed individuals who controlled the development of every single one of today's recognized science fiction writers."

Who started it all? "The originator of the science fiction genre was H.G. Wells," says the article, "one of the most evil individuals to have lived in the past one hundred years." Wells, it seems, was "a



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ASIMOV'S

Science Fiction

ANTHOLOGY

19 STORIES

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member of the elite British oligarchical planning group . . . committed to the establishment of a feudal empire run by an aristocracy which controlled all knowledge and technology and used them to rule over a population of ignorant drugged plantation slaves."

Then came Hugo Gernsback, who brought Wells's evil to the United States and, as a reward, he "was made a member of one of the oligarchy's leading cults, the Grand Ducal Order of the Golden Crown."

Then came Tremaine, who built up *Astounding Stories* and passed it over to John W. Campbell, who "maintained an almost total dictatorship over American science fiction, shaping it the way he wanted by selecting which authors would be published and which would not." (Well, that's true enough. He selected darned good authors.)

Then, in a sidebar headed "A Sci-Fi Editor's Stable," the author has something to say about five of the authors Campbell developed. He includes Heinlein, Asimov, de Camp, Herbert, and Clarke in that order.

Poor Arthur Clarke is, of course, utterly damned because he is "a British subject." Then, too, "he is a conscious disciple of H.G. Wells." Concerning Heinlein, he mentions "Blowups Happen," which, he says, "is the first published scenario for the nuclear disaster simulated [sic] at Three Mile Island."

And here is what he says about me, in full, to demonstrate my evil. "A firm believer in the Parson Thomas Malthus's doctrine of scarce resources, Asimov, along with Sprague de Camp, was brought in to work with Heinlein at the Naval Experimental Lab during World War II. Asimov's most influential work, *The Foundation Trilogy*, is about two small elite groups, one specialized in high technology and the other in psychological warfare, who tuck themselves away on a hidden planet and wait for the expected collapse of the galactic empire. The two groups are modeled on Britain's Tavistock Institute and from the hidden Aldermaston labs, from which all scientific research and development on the British Isles is controlled."

Well, that's three sentences. Sentence 1 is fairly correct. The name of the place was "Naval Air Experimental Station," but I wasn't brought in to work *with* Heinlein. Bob, Sprague, and I worked in the same building, but we had three different jobs and were totally independent. My job involved routine chemical analyses, and if I was part of a conspiracy, it was a secret from me, certainly.

The second sentence isn't very wrong either. The author seems to imply, however, that the "two small elite groups" were hidden on

the same planet, but they were not. They were "on opposite sides of the Galaxy," a point made over and over again in the Trilogy. It may not seem like much, but it leads me to believe that the author did not read the book. One could not have read it and missed that point.

But what about the third sentence? What on Earth are the Tavistock Institute and the hidden Aldermaston labs? Perhaps they exist; I wouldn't say they don't; but I had never heard of them up to the minute I read that sidebar. If there *is* any similarity, therefore, it was not purposeful on my part.

In fact, I wonder when these evil British laboratories were first

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founded. Are they post-war? If so, that's exciting news because the writer of the article may not know how old *The Foundation Trilogy* is. The copyright of the first book of the Trilogy is 1951, but the constituent stories appeared in *Astounding* considerably earlier. In fact, I began to write about those "two small elite groups," the First and Second Foundation, in 1941, so that they might (just conceivably) be older than Tavistock and Aldermaston.

Just imagine! Could it be, do you suppose, that these evil laboratories were modeled on my Foundations rather than vice versa? How thrilling that would be!

Having polished off Campbell and his authors, the writer of the article goes on to denounce the UFO-mania. I denounce that mania myself, of course, but the writer goes on to include among those who encourage these UFO beliefs Walter Sullivan of the *New York Times* together with "astro-mystic [sic] Carl Sagan." (Frankly, I'd sooner believe that *I* was part of this evil conspiracy than that those two were.)

In fact, I'm proud. With a conspiracy so widespread as to include everyone in the world, apparently, except the writer of the article himself, I would have felt very hurt if I had been left out of the universal denunciation.



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ON BOOKS: THE BEST OF 1981

by Charles N. Brown

It will probably be April or May when you read this, with the weather getting on to summer (unless you live south of the equator). But it's a rainy December day outside as I wrestle with my annual job of picking the best twenty-five science fiction and fantasy books of 1981. I get to do the job three times: a shorter list and discussion in *The Best Science Fiction of the Year*, edited by Terry Carr; this version; and a longer list and discussion in *Locus: The Newspaper of the Science Fiction Field*. In many ways, this is the hardest one. I can put anything I like on the long list and only books I consider outstanding on the short list, but the middle-length list takes some thinking.

There were fewer titles published in 1981 than in 1980 or in the record year of 1979 (1280 new and reprint SF books), but there were still nearly a thousand books. About 250 new novels appeared. These are books that made their first appearance in print in 1981, and thus this list does not take reprints into account.

Outstanding 1981 Novels

- 1) *The War Hound and the World's Pain*, Michael Moorcock (Timescape, \$12.95)
- 2) *The Claw of The Conciliator*, Gene Wolfe (Timescape, \$12.95, \$2.75, paper)
- 3) *The Cool War*, Frederik Pohl, (Del Rey, \$10.95, \$2.75 paper)
- 4) *The Many-Colored Land*, Julian May (Houghton-Mifflin, \$12.95)
- 5) *At the Eye of the Ocean*, Hilbert Schenck (Timescape, \$2.50)
- 6) *The Book of Dreams*, Jack Vance (DAW, \$2.25)
- 7) *Dream Park*, Larry Niven & Steven Barnes (Ace, \$6.95, trade, \$2.95 mass market)
- 8) *Project Pope*, Clifford D. Simak (Del Rey, \$10.95, \$2.75 paper)

As much as I tried, I couldn't come up with ten outstanding novels for the year, so eight will have to do. By the time this column appears, the names of the Nebula and Hugo nominees will also have been published, so you can compare my choices with those of the writers and the fans. I've made no attempt to separate science fiction from fantasy. The list is roughly in order of preference.

The War Hound and the World's Pain, a fantasy novel set in 17th-century Europe, has Satan as a sympathetic character seeking reconciliation with God. The lead character, a mercenary captain (the War Hound of the title), goes on a quest to discover the cure for the world's pain. The book is richly textured, is filled with interesting characters, and is written in a sympathetic ironic mode similar to the best of James Branch Cabell. Don't miss this one.

The Claw of the Conciliator, a science fiction novel written in a fantasy vein, takes place far in the future where past science might as well be magic. It's a continuation of *The Shadow of the Torturer*, which won the 1981 World Fantasy Award, and, alas, it does not stand on its own, but the writing is superb. Gene Wolfe, possibly science fiction's finest stylist, is at his peak in this series. The third book in the series, *The Sword of the Lictor*, will no doubt be on next year's list.

The Frederik Pohl of the fifties and early sixties was a master satirist who painted the future in broad, exaggerated strokes. The Frederik Pohl of the seventies was a realist who detailed unpleasant futures with a cutting edge of pessimism for the race but hope for the individual. *The Cool War* introduces the Frederik Pohl of the eighties, who manages to integrate his two earlier selves. There is broad satire, sharp pessimism, and, above all, humor in the new blend. Pohl still can't write endings, but the rest is wholly satisfying.

The Many-Colored Land and *Dream Park* are the top adventure novels of the year, but what a contrast. *Land*, the first of two books, is a good, old-fashioned action book with unarmed humans pitted against villainous aliens in an exotic setting on Earth in the Pliocene era. *Dream Park* is set in a near-future Disneyland where exotic Dungeons and Dragons games are played. The novel succeeds on both the make-believe level, set in New Guinea mythology, and the "real" level, a murderer loose in a park of the future.

An 1828 Cape Cod setting, a way station on the "underground railroad" used to help escaped slaves get out of the country, doesn't seem a promising background for a science fiction novel, but Hilbert Schenck brings it off in an impressive first novel, *At the Eye of the Ocean*. Schenck (pronounced Skenk), who published an underrated

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"Could it be . . .?"

outstanding collection of science fiction sea stories, *Wave Rider*, in 1980, knows the sea, New England, and the fascinating historical aspects of both inside out. His hero, Abel Roon, has the mental power to sense and understand the sea and the fantastic creatures who live in it and control it.

Clifford Simak and Jack Vance are old masters who seldom let the reader down. *Project Pope* is a low-key novel of robots and religion written with Simak's usual charm and beauty. *The Book of Dreams*, which ends Vance's long-running "Demon Princes" pentology, is neither low-key nor high adventure, although both moods intrude, sometimes simultaneously. In short, it's written in that ornate style unique to Vance's fiction. His villains are, as usual, fascinating. I spent part of the book rooting for Howard Alan Treesong.

Outstanding First Novels, 1981

The Breaking of Northwall, Paul O. Williams (Del Rey, \$2.25)

Starship & Haiku, Somtow Sucharitkul (Timescape \$2.50)

Radix, A.A. Attanasio (Morrow, \$15.95, \$8.95 paper)

First novelists need all the encouragement they can get. Most sell badly, and they also receive few reviews.

The Breaking of Northwall, the first book in a trilogy, is an oddity in first novels. It's well written and fairly simple. A post-Holocaust book set 1,000 years in the future, it reminds me very strongly of *Davy*, by Edgar Pangborn. *Starship & Haiku*, by an author familiar to readers of this magazine, has an effective Oriental background and some good ideas. *Radix*, the most ambitious book of the three, is a kitchen-sink novel that has something to appeal to or annoy anybody. It's a superman story in which the author manages the difficult feat of making an unappealing character both believable and interesting.

Outstanding Collections, 1981

Listen, Listen, Kate Wilhelm (Houghton Mifflin, \$13.95)

Gene Wolfe's Book of Days, Gene Wolfe (Doubleday, \$9.95)

A Life in the Day of . . ., Frank M. Robinson (Bantam, \$2.50)

The Woman Who Loved

the Moon and Other Stories, Elizabeth A. Lynn (Berkley, \$2.25)

Paratime, H. Beam Piper (Ace, \$2.75)

Collections and anthologies, like magazines, can be more than just stories. The Frank M. Robinson book has considerable autobiographical material as well as good fiction and information about editing *Rogue*, *Playboy*, and other things. *Listen, Listen* has only four stories in it, but the lead one, "The Winter Beach," is a knockout. It should be on the awards ballots this year. Wilhelm has always been best in the novella form, and "Moongate" is also outstanding.

Gene Wolfe has tied each story in his collection to a holiday. Sometimes the connection is tenuous, but there is certainly nothing weak about the 18 stories included. Don't miss the introduction.

Elizabeth A. Lynn hasn't written very much short fiction; in fact, all of it is in this volume. The book is fascinating because it's arranged chronologically. You can study how a writer progressed from tentative beginnings to the award-winning title story.

Ace has just packaged H. Beam Piper's neglected short fiction in several volumes. All are of interest, but *Paratime*, which contains his series of stories about policing alternate worlds, is easily the best and most integrated. If possible, skip the introduction.

Outstanding Anthologies, 1981

Science Fiction Hall of Fame: Volume Three, Arthur C. Clarke, ed. (Gollancz, £8.95, Avon, \$3.95)

The Best Science Fiction of the Year #10, Terry Carr, ed. (Timescape, \$3.50)

The 1981 Annual World's Best SF, Donald A. Wollheim, ed. (DAW, \$2.50)

A Treasury of Modern Fantasy, Terry Carr, ed. (Avon, \$8.95)

Universe 11, Terry Carr, ed. (Doubleday, \$9.95)

The anthology category and the nonfiction category were the hardest to pick because there were so many important books published last year. An anthology is both a collection of good stories and a reference book for the future. Thus, *The Science Fiction Hall of Fame #3* is important because it contains all of the Nebula winners from 1965 to 1969. I've listed the British edition because it was the one available in 1981. There will be an Avon paperback by the time this review sees print. The two bests-of-the-year never overlap very much and usually give us the best record of the year past. *Universe*, the best original anthology published each year, is on the cutting edge of the newest in SF. It usually provides a showcase for the talents of the future. *A Treasury of Modern Fantasy* is an attempt to provide

a chronological history of magazine fantasy from *Weird Tales* in 1924 to *Weirdbook* in 1978.

Outstanding Non-Fiction, 1981

The Art of Leo and Diane Dillon, Byron Preiss, ed. (Ballantine, \$30.00, \$14.95 paper)

Twentieth-Century Science Fiction Writers, Curtis C. Smith, ed. (St. Martin's, \$65.00)

Twentieth-Century American Science Fiction Writers, David Cowart & Thomas L. Wymer, eds. (Gale Research, \$104.00)

Anatomy of Wonder: Second Edition, Neil Barron, ed. (Bowker, \$32.95)

The Dillon art book contains not only fascinating art but also a technical discussion of each piece, which makes this a most important reference book on commercial art. The other three books are all important reference works, and your local library should carry them. Although the two twentieth-century books have a lot of duplication of subject matter, their treatment is completely different. Both books have biography, bibliography, and criticism. The St. Martin's book covers over 600 authors, while the two-volume Gale Research book covers 90, in somewhat more depth. The St. Martin's book tends more toward literary criticism, while the Gale Research volume is mostly literary biography. The Bowker volume contains plot summaries and evaluations on most important SF books, as well as articles on SF.

Charles N. Brown is the editor and publisher of Locus, the Newspaper of the Science Fiction Field.





THE TIDE WILL COME

by Tony Richards

art: George Barr

Mr. Richards lives near London, England. His first SF sale to a U.S. publication, "The Lions of Tulath," appeared in these pages back in July 1981.

We searched all that first day for signs of survivors. It was a hopeless task, futile—and we knew it. But we felt obliged to search. There were sixteen of us in Rowland's unit. We started from the dead volcano at the island's heart, and split up into teams of two, scouring Circe Isle from tideline to receding tideline. Without a prayer. Without even the echo of a chance.

Around mid-morning, Rowland stooped over a rock pool, then crouched down, plunged his hand in, and called me. I came running as fast as I dared. My heart was pounding fit to burst. But he had only found a guy rope from one of the first unit's bubble-tents, still knotted to its clamp ring in the submerged ground. Its loose end was frayed where the storm had snapped it. A common Atline seaweed enshrouded most of its twisted length, luxuriant and green as mermaid's hair. And changing, even now. Its oceanic life was almost over, its rebirth a full long month away. Then, when the waves returned, the Atlantican mainland was the only place to be. The Great Plateau, all dry and dead. The first unit had known that, and had left it far too late.

Rowland dropped the rope back in; and as he turned away from

the pool, he skidded. His left foot went in, right over the boot.

"What the hell," he grunted with disgust. "I'm soaked to the skin anyway."

We both were. The island was still waterlogged from its four weeks' immersion, and every dip and hollow had become a tiny lake: every rock was slick with stranded weed and *Atlantemones* and tiny tough-shelled mollusks. The sun was blazing furiously down, endeavoring to scald the island dry. And so there was humidity, and strange seeping mists on the air. And we were soaked right through.

Rowland emptied his boot in sullen silence, led the way ahead.

And, just before noon, I slipped for the hundredth time, and practically fell on my face . . . and caught a bright glint in the corner of my eye. The glint was silver; the sea had not marked it. The object was a pendant on a chain. I untangled it from the rocks and held it in my palm, watching it glitter softly in the mist-filled light.

"Isn't it lovely, Ray?" she'd said, and she had been so proud.

A tiny silver dolphin, made especially for her. Yes, it was still lovely. But now an *Atline* pinshell had anchored itself on the dolphin's head. I tried to scrape it off. It would not budge. And by the time Rowland had reached me, though I tried desperately to stop it, I had begun to cry softly.

The pendant had been Sonja's eighteenth-birthday gift from our parents. My kid sister was dead.

One copta had somehow made it out, somehow struggled back to the mainland. Two men and two women aboard—they thought that they had made it. And then the motor cut, thirty feet up; and the copta had creamed into the ageless and uncaring rock, flipped over, and exploded.

I went to see the one survivor. He was a young man, in his twenties, cocooned from head to foot in plastic flesh; and he knew that he did not have long. All the same, he talked to me for as long as he was able.

Sonja had been the best unit leader he had ever worked with, he said. If they had no results after that first full month on *Circe*, it was not her fault; she had *tried*. She never slept, hardly ever ate. And she became progressively obsessed with that mysterious, magical isle. She seemed to have a hunch, and simply couldn't prove it. On the evening before high tide, their last night on the island, she had come back from the shoreline more excited than before. She had seen something strange happen to one of the *patshar*, the amphibious mammals which swarmed around *Circe's* coast. She didn't say what,

seemed completely lost in thought, and retired to her tent early though her light was still on long into the night.

And the next morning she was gone. She had left a note behind, telling all the others to leave her there, get to the mainland while they could. It was an order which not one of them obeyed. The storm was brewing by then, and the tide was rising like a great hand lifting for a blow. They ignored both and continued the search.

Sonja was found back on the shoreline, gazing out to sea, quite calm until she heard them coming. Then she screamed at them to leave her, even fought them physically. It took four of the men to carry her back to base. And by that time, it was too late to leave.

And that was all, save the survivor's testimony to the fate of the first unit. No other records were retrieved, nothing to prove or disprove the inquest's verdict that my sister had gone insane. Overwork and obsession had caused a mental breakdown, the inquest had said, culminating in a suicide attempt which caused the loss of fifteen other lives. And the file was closed.

Sonja was the sanest, least suicidal person I had ever known. I applied for transfer to Circe Isle the morning after that.

We were closer to the shore than I had thought, and Rowland led me there. He may not have liked being posted on Circe, but he'd studied the island fully before coming, knew his way around. The fog was much thinner out there. He sat me on a rock, right on the edge where the terrain sloped sharply down, then hunkered down beside me and offered me a cigarette from a sealed plastic pack. I shot him a surprised glance. Tobacco had been illegal in this sector for years, and even legal vices were remote to Rowland's life. But the circumstances required a sad, contemplative smoke; and Rowland had doubtless foreseen that several weeks ago.

I nodded and accepted. The cigarette ignited with the pressure of my lips; and I drew deeply, choked. The last few tears squeezed free.

"Are you okay now?" Rowland asked, emotionlessly.

"I think so." I was feeling stupid. "Chalk that up—the first time that I've cried in years." I had, I suppose, refused to accept the truth fully up till then, despite even the inquest. I'd heard the tape of the first unit's final call, of course. The heavy static. The background noises of the storm and sea, and the frantic voices. They were trapped. The storm had sprung up violently, leaving them in a prison without bars. They'd begged for assistance: impossible. Then two of the gravcoptas had gone up; one had failed immediately, and the noise of it crashing had echoed across the airwaves. And, God, the

last hysterical words still echoed in my mind. *The tide's coming! The tide's coming!*

"It looks so gentle now," I said, indicating the tideline. "It's melting back, as though the whole thing were a dream."

Rowland glanced at me sharply. "I didn't want you on this unit, Page. Did you know that?"

"It was no secret."

"Personal involvement: a bad thing on a scientific trip. But then, Command always goes over my head."

He was staring across the massive sea. Not at the shrouded isles of Hornblower or Monserrat, but farther, where a strip of grey on the horizon marked the Great Plateau. Twenty million square miles of desert and wasteland and hostile mountains which made up one percent of this vast, ancient world. The bloated moon Tidegod was over there, crawling its slow orbit of the skies. The ruins were there too. Shoreline City, on the cliffs. That was where his dry heart lay.

"Command!" he muttered, mostly to himself. "They can't see the stones for the rubble. That pile of dirt was once the capital of a great civilization. We don't know who they were; we don't know where they went to. And Command doesn't seem to care. They send me out here instead, to play Robinson Crusoe over some mere biological freak."

"Shoreline will still be there when you get back. We've got only a month before high tide."

Rowland was amused now, in his own cold way. "And you're going to take up where your sister left off, young Page? You are going to prove that she wasn't mad?"

"Something like that," I conceded.

"There is *always* something like that. No purity in research any more."

And he sounded almost as lonely as I felt. My cigarette was burning low. I drew on it again, then got up and headed inland.

The sunlight had been working at the fog, eating at it like moths at finest silk. There were loose patches in its fabric now. The ground was slowly becoming dry. And I was looking for a smell that was not there. The salty, cloying odour of a waterline exposed to heat. It would be present on Hornblower and Monserrat and every other island in this area. But not here, not on Circe. No decay. As the volcano drifted into sight, I felt a scuttling inside my clenched left hand. I was still holding the pendant. But the pinshell which had made its home there had transformed. It struggled out between my fingers on six tiny legs, clambered up onto my knuckles. Its gold-

green carapace opened, revealing filmy wings, and in a second it was spiralling away.

The dry heat of my palm must have done it.

"First Change," I said, watching it fly.

But not the last. Not for myself, not for Rowland, not for anything on this strange clump of rock. They had another name for Circe on the mainland. They called it the enchanted isle.

We had the camp set up in just two hours, the mobile labs prepared, the coptas battened down and all the auxiliary gear like the small jetpacks safely stored away. It was not difficult to see why Rowland had been chosen to head the team. His genius was straight administration: he had the knack of communicating orders *just enough*, so there was no feeling involved but the message was crystal clear. He commanded respect at a glance. By the end of the two hours, his unit was the tightest I had seen.

Sunset came and went, and—on that first day—no one really took it in. We were all tired. But more than that, the fate of the first unit had left us anxious, twitchy, somewhat dulled. We retired early to our own bottomless dreams.

Mine was a nightmare. I was Odysseus, returning from the wars, and I had landed on a magic isle. Circe the witch was there. She had changed all my crew to pigs; now she was changing me. I tried to cover my face, but my hand had become a skeleton, still clasping a tiny silver pendant. The silver dolphin sprouted wings and flut-tered off. And I was left alone. . . .

Rowland woke us all at six the next morning. In rousing me, he lightly touched my arm. I screamed out loud. Rowland gazed at me morosely.

"Full Change was completed an hour ago," he told me. "I'd be grateful if you stopped yelling and got to work."

Outside, a thousand insects hummed. The smell of pollen wafted through the flap. I'd awoken in Paradise.

It was twelve hours later when I stumbled out of the mobile lab. Twelve hours straight of cross sectioning plants under a microscope, of working in a plasteel box ablaze with harsh white light. The failure had taken its toll more than anything else. Nothing had taken me any closer to understanding what had made Sonja stay. My specimens had once been *Atlanemones*; they had transformed into land flora; and I did not have a clue how.

Rubbing the grit from my eyes, I headed west, past the extinct

volcano toward the setting sun. Sonja had been found on the coast. It seemed reasonable that the solution lay there.

There was a school of *patshar* near the shore when I arrived. Amphibious mammals, the largest creatures we had found on this world so far. They gamboled on the waves, flippers working lazily, sleek brown bodies flowing like oil. What was it the survivor had said? *She had seen something strange happen to one of the patshar.* I observed them for a while, futile though it was. There was nothing extraordinary about the creatures save their total peacefulness. No shortage of herbaceous food, no natural enemies. As happy as a *patshar*, the Atlantican expression went. Before long, they had mesmerized me with their careless grace.

I was still watching them when a footfall behind me broke the spell.

It was Lois Cheyney, one of the best of the unit. She had worked with Rowland and a few of the others before, and she trod between them carefully and got on with her job. Not cold or distant either; you were always aware of her presence in the lab, and you'd glance at her from time to time, and she'd look up and smile.

She stopped beside me cautiously, long black hair astir in the sea breeze. The smile was still there, bright as ever. "You look at ease," she commented. "I was beginning to wonder whether you stayed stern all the time."

Had I really seemed like that? I suppose, yes, without realizing it. The *patshar* were chasing each other idly. I kept my gaze on them.

"I wish, I wish, I were a fish," Lois intoned, capturing my thoughts precisely. "Or an amphibian at least."

"It's been tried. Artificial gills, all that. The oxygen intake isn't high enough; the blood cools down too fast. You get brain damage for your pains."

Lois laughed. "You sound like Rowland. Did you know that?"

"I didn't think I was quite that bad." And I could feel the laughter building in me too, the thought of Rowland was so preposterous. "What is it with him anyway? He acts like a machine."

"He'd be flattered if he heard that. *Homo technologicus*, that's his dream. Mankind thundering across the stars, ever onward, ever progressing towards some final unknown goal. And no room for compromise either, that's not Rowland's style. The goal is all. No stop-over periods on any island paradise. No scenic route." She bent down, cupped a scarlet flower in her hands as though it held all the secrets of the universe. "He hates this place. It evolves backwards and forwards and never progresses. And mankind wouldn't progress

here, just grow lazy and sit out in the sun like the *patshar*."

"I know all that. It's not the *what* I'm after, it's the *why*. How does a man become like that?"

Her face came up, and she looked almost shocked. "You don't know the story? I thought everyone on Atlantica knew that."

"So I'm ignorant. Enlighten me."

"No," she said. "Later, not now. It's far too beautiful an evening to spoil."

Before I could protest, she had walked ahead of me, right to Circe's edge. The tide level had dropped six feet, so that we stood on a small cliff. Below our feet, the *patshar* circled and spiralled in their green world.

As we watched, something moved in from the sea to meet them. Something which was shapeless, which moved fast, which glittered. And turned out, as it drew closer, to be a thousand scintillae of light, all shimmering and shifting like a horde of fireflies. It—*they*—rushed amongst the *patshar*, joining in the creatures' play. Curling round their smooth bodies, smothering them in stars.

And then it seemed to notice us. And stopped, dived, vanished.

I blinked. It had come and gone so fast. "What was that?"

"I don't know," Lois said, shaking her head. "A school of tiny fish, maybe?"

The smile returned. She reached out and took my hand suddenly, and I flinched, suspecting sympathy. So much had gone unspoken.

"I don't need anyone to lean on," I told her.

"Good," she said. "I wasn't offering. Come on. Let's walk. I'll tell you the story of *my* life."

The sunset that evening was crimson laced with gold, which burnt against the horizon and lit the waters with its flame. And after it was gone, when all was swaying shadows and hushed calm, we continued to walk and talk. At last, we found the way back to my tent. Lois stayed there. We were so drugged and hazy that we slept motionless in each other's arms, and only made love when we awoke with the dawning light.

Later, we went down to the shore again. The tide had dropped another three feet in the night, just perfect for a dive. I began to undress. Lois hung back.

"I can't swim," she explained, embarrassed. "I was brought up on Costaine before there was a proper community there, I never had the opportunity to learn."

And so she watched while I attempted a perfect jack-knife, belly-flopped, and came up sore and laughing. I struck out from the shore,

feeling the cool clear water wash against my skin. I spent my energy quickly, let myself drift. The mobile lab and Rowland were forgotten for the while—and though Sonja was not forgotten, though that verdict of insanity still consumed my mind, hers had become a wistful childhood memory to be cherished and loved. My sheer bitterness at her death was gone. I had Lois to thank for that.

The pain came before I knew what was happening. It started as a sharp itch in my skin, then suddenly spread out till my whole body was on fire. I panicked, flailed and tried to swim. Something was happening to my muscles. They seemed to have gone soft and viscid, would not move. I could hear Lois shrieking, feel the water closing round my face.

And then the motes of light appeared, enveloped me, held me. And, even drowning, I became aware of only them. The tiny specks were all part of one being. I could feel it, sense it was alive. And sentient in an unhuman way. Its consciousness invaded mine, a wild babble, like a thousand voices, a sheer deluge of sound and image. There were visions of the sea, and glimpses of vile monsters, thoughts of misery, of love. And colors. And smells. All mingled, mad.

One image, one thought alone stood out. *There was a patshar crawling across the rocks. Too far. Trying to . . .*

Then it was gone, back into the maelstrom. My mind took it all for less than a second before I blacked out.

I came to seconds after that. I was at the shoreline, and Lois was crouched like a frightened crab, dragging me out. The thing of lights had saved me.

"Mild dehydration," the unit's medic told me. I was sitting in Rowland's tent, in front of his fold-away desk, and Lois sat beside me. "I'll give you a pill. Otherwise, drink plenty of fresh water, and stay away from alcohol."

The medic packed his instruments and left.

From across the metal desk-top, Rowland gazed at me steadily. His eyes reflected the dim electric light, twin brilliances in his sallow face. He had not ventured from the camp since the first day we arrived.

He leaned back in his chair. "So, you say it actually *helped* you. You're sure it wasn't attacking instead? There *was* the pain."

"The pain came first," I said. "I'd never have got out of the water if that thing hadn't come along."

"And you think it was sentient?"

Lois was watching me.

"I *know* so. I can't quite describe how I know but . . . it was the difference between a sleeping man and a corpse. They both look much the same, but one has the spark and the other hasn't. I . . ."

It all sounded so vague, half-remembered now, like the recollection of a childhood pain. I only knew that it had tried to reach me, touch, communicate, in ways I could not understand. And now I was trying to convey that lack of coherence to someone else.

But Rowland seemed interested. Surprisingly, for the first time, he wanted to be reached. His eyes were bright with far more than the glow of the electric lamps.

"It tried to follow us," Lois cut in; and, God, I could remember that. "It came right to the surface; and then it rose out, like a glowing mist. We were terrified, I'm afraid. We scrambled back across the rocks. It came right close. And then it seemed to sense our fear. It went back to the sea."

"You think it was sentient too?"

"I think it showed compassion and altruism, and sensitivity to human thought. That's all I could actually observe. But if it was a straight vote, I'd be forced to go along with Ray."

Rowland nodded. It was the first time I had seen him yield to intuition, and I was beginning to realize why.

"We haven't any concrete proof," I pointed out.

"But it's a *chance*. You say there was confusion, babble. Could it be some kind of mass mind? Could it possibly be that the inhabitants of Shoreline City passed beyond the corporeal stage?"

Pure energy. Pure thought. A totally advanced species, his burning dream.

He got up from his desk and went to open the tent flap, stood framed there against the bright morning light. He was looking at the greenery, at the brilliant, sun-coloured blooms—but I don't think he was really seeing them. There were tense cords standing out in his neck. You could almost hear his mind whirring.

"If I believed in fate," he said, and left the sentence unfinished. "Robinson Crusoe, yes. I should thank Command for this. I've got the whole island to myself, a full scientific team; and, by God, I can *really* use them now. There'll never be another chance like this."

Lois got up and left shortly after that, and Rowland barely noticed her go by. He was already planning. And I knew in my bones that, now he was interested in Circe, the island would never be the same. He would contaminate paradise with his touch.

When he finally turned around and saw me still sitting there, his

expression reminded me of someone caught in an illegal act. I was invading the privacy of his dreams.

"What do you want?" he asked.

"I would have thought that was obvious. I want to help head up this new investigation."

"Exactly why?"

I clasped my hand to my head, closed my eyes, remembering. "One image stuck out when that creature smothered me. An image of a *patshar* crawling across the rocks. It had . . ." The picture was becoming clearer now, a photograph developing extremely slowly in my brain. "It had got too far from the water . . . its flippers couldn't carry it back . . . and it was trying . . . trying . . ."

I stopped. I was rambling, and the look in Rowland's eyes asked far more eloquently than mere words, *Does insanity run in the family, young Page?*

"The survivor from the first unit told me Sonja saw something unusual happening to a *patshar*," I said. "And now, I get the same image from that swarm of lights. There has to be a connection. I have to find that entity again."

"Permission refused," Rowland said. "I've told you, I want no personal involvement on this team. You're not to go near the shoreline."

And abruptly I was on my feet, enraged. "You can't do that!"

"I can do anything I want now," Rowland said. "We have an alien beast out there, and we don't know its purpose. I'm declaring a state of emergency on Circe. Guards will be posted around the camp, *armed* guards. No one leaves without my say-so." The glow was there, suffusing his whole face. It was the face of a man obsessed—or maybe even worse. "This is *my* big moment, Page," he grated. "Stay the hell out of my way."

It was only then that I realized the true nature of the man to whom I'd asked to be assigned.

The new duty rosters arrived at eleven. The search for the new being was on. All but three of us had been taken off the biological project. And, despite her primary contact with Rowland's super-entity, Lois was to be left behind.

"It seems that Rowland doesn't like the company I keep," she commented over lunch. There was an air of excitement all around us. New preparations were already being made.

I toyed listlessly with my food. "I'm sorry."

"Don't be. I'm kind of grateful to be out of this." She paused. "What are you going to do now?"

"Sit it out for a few days," I said. "No point in getting shot or transferred. And Rowland can't keep me cooped up forever."

So we buried ourselves in our cross-sections and soil samples and cellular charts, came up with nothing. We played backgammon and gazzar and made quiet love most nights. And anxiously, as though through a guilty third eye, we kept track of the happenings outside.

The searchers had coined a name for the being, a lurid, purple kind of name. They called it the Fireghost, but never when Rowland was in earshot. Work went on eighteen hours a day. It was impossible, so we were told, to walk down to the shore without bumping into someone or some pile of instruments or both; Rowland had left his trademarks all over the isle. Even the gentle *patshar* had been scared away. And all for nothing. Seven days of non-progress, non-sighting, zero contact. Seven days when men trooped into camp exhausted and blank-eyed, and Rowland's temper rose. At last, even the guards were reduced to a token force. The Fireghost had flinched away from fear. Perhaps it flinched from obduracy too.

But what the searchers *did* find was remarkable. All that week, they had been scanning the shoreline, sending out roboprobes and sensors, hunting for traces of energy from their prey. Their reading continued to come back blurred. It wasn't storm or static, sunspots or electric faults. They traced the problem in the end.

There was a forcefield of alien design enmeshing the whole island.

On the eighth day, the experiment was set up. Lois and I had lifted a carnelian flower, soil and roots and all, and set it inside a large flask, surrounded it with sensors and a molecular probe. And, while Rowland watched me dully from the back of the lab, I poured in half an inch of fresh saltwater. The tide was rising for that plant.

Half a dozen needles leapt across the scale. The alien forcefield had suddenly peaked in the lab. The flask was its focus. And our eyes and the molecular probe confirmed it—the land flower was transmuting back to an Atlane-mone.

"There's your biological freak explained." In part, anyway. As I had said to Lois, it's not the *what* I'm after, it's the *why*.

Rowland shouldered in beside me, gazing at the mutation with growing awe. "Our people have been attempting this for—how long?"

"Molecular restructure? Ever since the old Greek alchemists." I tapped the side of the flask. "It seems your city dwellers left a legacy."

The forcefield was emanating from the direct center of Circe, from deep within the old extinct volcano.

§ § §

Long after the sun had set, Lois and I continued to sit on the ground outside my tent. The night was very still. We were surrounded by motionless violet shadows, haunting fragrances. And yet we had not touched for hours, hardly even said a word. Lois seemed quite far away, as distant as the sparkling stars.

At last, I reached around her shoulder. Her body trembled beneath my touch.

"What's wrong?"

"I'm afraid. For the island. For myself. I wish the tide would drown them all. Rowland is going to tear this place to pieces."

Rowland had sent out to the mainland for laser drills and blasting equipment. They were due to arrive the day after next.

"If it wasn't him," I said, "it would be someone else."

"You, perhaps? Trying to find the proof to vindicate your sister? You two are very much alike, you know—both committed to unshakable goals." She trembled again, like a butterfly. "Sorry, Ray. That wasn't fair."

"No? I want to get inside that mountain too."

"Except that he'll enjoy it. It's the look on his face I can't stand. Like some king-sized wicked child."

Gazing out across the isle, we found it hard not to see Rowland's face superimposed on every detail there. The expression of the snake as it crawled down from the apple tree. "You said there was a story about him. I haven't heard it yet."

"Oh God." Lois drew her knees up to her chest. "This isn't fun to tell."

"Just try."

"Well . . . when Rowland was in his early twenties, he was a devout Reversionist."

She might as well have said he was a Buddhist nun. Reversionists believed in getting back to nature all the way. They'd formed a pantheistic cult, and the thought of Rowland joining them made me want to laugh out loud. But Lois's expression was deadly serious.

"They set up a commune on Menni in the Pleiades. It was beautiful there, beyond belief. The commune forsook our technology completely. They built their own homes, lived on what they grew. A simple life, incredibly basic. And they were happy, for a while. And then the Raw Plague struck."

Something in my stomach turned. I suddenly did not want to hear more. I'd once seen a victim of the Raw Plague. Once was enough.

"They had no way to beam for help, no medicines save a few herbal potions for grazes and warts. It turned out Rowland was naturally

immune. But his wife and two small children weren't. It took eight months for them to die. And that's the story. Satisfied?"

There was no way I could feel sympathy for Rowland. I was too involved, too entrenched. The hatred had bored far too deep. But now, I could *understand*. I could look out on Circe and see it as Rowland saw it, crawling and repulsive, alive with danger, death. Perhaps the understanding was the worst thing of all.

I sighed gently. "It's a reason, not an excuse. He's only switched extremes. Shut off his human side, condemned himself to flare across the void forever, like some damned machine."

"He has a purpose," Lois said. "He wants to progress so far, nothing can hurt him any more. He wants mankind to be invulnerable and great. His first paradise failed him. Now he's looking for a different one. We all are, I suppose. Always have been since we crawled out of the swamps."

"And he moves so fast toward that goal, he'll miss the real Eden when he walks through it."

"He hasn't missed it here, if that's what you're thinking. Not even on Circe. It's only got two more weeks. And then the tide will come, as it always comes, and we'll be pushed out again. Perhaps there is no paradise. Perhaps all we humans have got—is each other."

Her face was turned away from me, and she resisted when I put my hand beneath her chin. She was crying. Even in the near dark, I could make out the damp tracery across her cheeks. Her eyes held me, open and honest now, unashamed of the falling tears. She was crying for our love. And we both knew that, once Circe was resubmerged, once we had returned to the mainland, the beauty and the magic of our time together would be lost. Perhaps forever. We were living the lie of transience.

I brushed away the largest tear and tried to smile. "Come on. Let's get inside."

"No. I want to be alone for a while." She began to stand up, then leaned over and kissed me tenderly. "I won't be long."

I watched her until she disappeared. And then I sat and waited. And sat, and waited. And finally got up and slipped past the guard and searched. Lois never came back.

We found her clothes piled neatly by the edge of the cliff. It *was* a full-fledged cliff by now, a drop of sixty feet. The ocean was at low ebb. Rowland peered down into the waters, angered and dismayed.

"She must have been insane to try a dive like that!"

"She couldn't swim," I said, very quietly. "She never learned how."

"Oh. Oh, Jesus." And, for an instant, a chink almost appeared in his armor. Then he stared at me steadily. "She was with you last night?"

I nodded, feeling ill.

"You . . . had a disagreement?"

"No. But she was upset about something."

"And what was that?"

"You wouldn't understand."

His eyes blinked fiercely. "I see." And he ordered one of the others to collect Lois's clothes, and then he strode away. No one would look at me or speak to me. And I was left alone once more.

The day passed without my noticing. The evening brought the vanguard of a gale. I lay in my bubble tent, unable to sleep. The bed felt vast and featureless without her there. *I won't be long*, she'd said, and it kept echoing across my mind. First Sonja, then Lois, gone. Both lost in paradise. There was nothing I could do save toss and turn and listen to the howling wind.

I'd somehow worked myself to an exhausted doze when the tent flap ripped open. Leaves and bits of twig came spinning in. And then, quite suddenly, the air in the tent became still. The smell of the ocean flooded over me. Motes of purest brilliance engulfed the tiny space.

The Fireghost was there.

I stiffened, tried to sit up straight. Too late. It closed over me with a fragile sigh. Clammy and dense, like thickest fog. And babbling. The image of the stranded *patshar* came again.

I opened my mouth, and blacked out before I had time to scream.

I was smiling when Rowland jetpacked through the skies toward me. Just sitting, on a ledge half way up the wall of the volcano, freezing cold and shivering, and smiling like an idiot. The gale had passed hours ago. Clear morning light was flooding the land. I had been waiting for a while.

Rowland landed beside me and clung onto the rock.

"We've been searching for hours. What the hell are you doing here?"

I displayed my hands. They were dirty and torn from the long climb. "The Fireghost brought me," I explained.

"It contacted you?"

"Sort of, yes."

"In a dream?"

I shook my head. "There are no dreams like this."

And I stood up and led Rowland the rest of the way. Just a few yards farther up, the gale had disturbed the rocks. One had fallen, hit into the next, and caused a chain reaction till . . . an opening was exposed. We had to crawl from there, moving from sunlight to darkness to a lambent ghostly glow where phosphorescent algae limned the walls. Once or twice, I glanced back at Rowland. His strained, determined face was bathed in the pale light; and all his skin suffused, like a man caught in the hysteria of a holy cause.

"Not long now," I told him.

He grunted and continued to crawl.

And the tunnel opened up, just high enough to stand. And we came to the door. It was made of metal yet did not reflect the light. And there were markings on it, engraved very long ago.

Rowland reached out to touch them, and the door slid aside.

It was like walking from the future to the past. Artificial light came pouring out; and soft, rhythmic, mechanical tickings and whines; and all of it transfixed me even though I'd been this way before. Rowland was spellbound. He stepped through the opening like a sleepwalker, did not even notice when the door slid shut behind us. The first time, I had jumped like a frightened deer when it did that.

We were inside a high-vaulted steel chamber deep within the rock.

"Inhabited?" Rowland asked.

"No. Looks like it. But the Atlanticans left long ago."

No dust, no decay, pure fresh air. Lights so bright you had to squint. They had once been a most orderly race. As Rowland and I walked across the metal mosaic floor, the dirt our boots had brought in was absorbed. Our footsteps and our voices made no echo in that place. To our left, a huge stone plaque etched end to end with symbols was set against the wall. To our right was the source of the soft noises.

It was Rowland who reached it first. I had been terrified, thinking the blue viscous growth was some kind of vast creature. But Rowland recognized it instantly for what it was. He reached to touch it, then pulled back, stood there like a humble supplicant. The growth was translucent and seemed to follow no fixed symmetry or form. Sparks of power coursed throughout the jelly on exact, sharp routes. Thousands of them, intersecting like a swarm of flies.

An organic computer. It would never break down, never die.

"Sometimes," Rowland said, "I thought I'd never live to see this. A working example of Atlantican technology. This must be what controls the Change on Circe. Powered by . . . the magma heat below

the volcano?"

I nodded. I had guessed that too.

"At least we know what causes the transmutations. If only we could work out why."

"It's all there when you find time to translate." I pointed to the symbols. "I have a solid theory, though. This computer, this room: they've lasted long after the cities fell. And since the old Atlanticans were too advanced for randomness, we can assume this place was *built* to last. We were wrong about Circe, about the Change. The only thing which changes is its *physical* appearance. The function is maintained."

Rowland was looking at me uncomfortably, as though he sensed he was not going to like my conclusions. I remembered the Raw Plague, and decided to take it gently with him.

"All it is," I said, "is all it ever was. An island paradise, a place to bask and dream. When the tide's out, it's flowers and insects and wonderful perfumes. When the tide's in, it's flowing green seaweed and pastel Atlanezones. The Atlanticans wanted that, far more than they wanted their cities and their machines. So they built this for themselves, an eternal heaven."

"That's a lot of assumptions," Rowland snapped. "You're telling me the Atlanticans were amphibious, for one. Where is your proof?"

I took him by the arm and led him down the length of the computer, to the far end of the hall. And there, surrounded by a ring of symbols, was an etching of an Atlantican. The eyes were not so large, the body not so sleek. The limbs had not been truncated to flippers yet. But the basic physique was unmistakable.

It was a *patshar*.

Some time later, I found Rowland back outside, back on the ledge. It was a gorgeous vantage point from which to view the island. All the colors down below ran into one amorphous, brilliant mass, streaked and vividly confused as some Impressionist oil painting from Earth. Yet Rowland was gazing beyond, at the bright wide band of the sea. He heard me coming, did not turn. His eyes were hidden from me. Somehow, I was glad.

"You've come to gloat?" he asked.

"Over a man's dead dreams? No. I've had too many of my own."

Rowland's shoulders went slack. "I just don't understand it," he said. "They were so advanced. They were really *getting* somewhere. A race spends a million years crawling out of the sea, learning how to build shelters, grow food, live in comfort and safety. It strives for knowledge, for an end to pain and hunger and disease. And then it

reverts, it goes back to the ocean again. None of it makes sense."

"They've found what they were really looking for," I told him. "They're happy. Are you?"

And he turned on me angrily. His eyes. Mad eyes. Devoid of tears or sorrow; just empty desert plains on which no rain could fall. Then, he activated his jetpack and soared back through the skies toward the camp.

I slept, back in the bubble tent, exhausted from the night's events. And, hidden from the warm light of the sun, I dreamed once more. There was an ocean in my mind. The *patshar* gamboled there, happy, so happy. But the witch Circe had turned my feet to roots. And my dream self stood on the rocks, and watched the happy *patshar*, and I could not join them. They had found their own answer, their paradise. It was not mine.

All at once, the stranded *patshar*, the image which the Fireghost had first implanted in my mind, appeared beside me. And I knew, with a certainty which stretched beyond mere consciousness, that I was seeing what Sonja had seen that last afternoon of her life. How or why, I did not know. I merely observed through the misted, oddly-focused lenses of my inner eye.

The *patshar* was crawling across the rocks. It had gotten too far from the shore; and, however desperately it tried, its flippers were not strong enough to carry it back. Its hide was drying under the glare of the blazing sun, its eyes were beginning to bulge, its pink tongue was lolling helplessly. And then, even the *patshar* began to change. The front flippers and the neatly-spliced tail swelled with added musculature, quivered with new strength. In seconds, it had become powerful enough to drag itself to safety. It was gone in a flash, free.

And now I knew what Sonja knew: that Circe's metamorphosis was not confined to plants or creatures which anchored themselves to the rock, but to anything which fell within the island's influence. Any living thing.

I woke up with a start.

The camp was quiet. Silent, with that air of hushed expectancy which precedes a storm or a firing squad. I dressed quickly and went outside. A group of four were slinging jetpacks on, to make off for the chamber in the volcano. They became uneasy as I approached. I asked where Rowland was.

"He's gone to get a *patshar*," they told me.

"Get?"

"A specimen, for dissection."

And they pointed in the direction he had gone. I was running, running, crashing through the flowers and the plants and parting clouds of insects in my blind, furious rush. I reached the cliffs. I skidded, almost fell.

Rowland was down there with a jetpack, hovering a yard above the water. There was a laser rifle in his right hand, a mass of netting at his belt. He looked like some ancient gladiator. And he was stalking a school of *patshar*, though there was no need to stalk. As he drew close, they all turned around and nosed toward him playfully, gazing at him with their bottomless brown eyes.

Even at this distance, I could see his face. It was bathed in a new kind of light, one which came from within but had not been released till now. A man obsessed—or even worse. The seeds of madness had lain dormant in him for a long while. Now, they had borne spiteful, bitter fruit. The *patshar* had destroyed his theories, his goals, his dreams; he was exacting his own warped revenge.

I shouted, screamed. He did not look up.

He drew his rifle to his shoulder.

The Fireghost... came from nowhere. Like an express train emerging from the dark. Just that deadly, just that fast. Rowland yelled. He dropped his rifle, tried to turn. And the Fireghost was on him, hurling itself into tight orbits around him until it became a bright blur, an orb of spangled light with the terrified man trapped at its core. Somehow, Rowland managed to break free. He worked frantically at the jetpack's controls, zigzagging higher in the air, trying to reach the cliffs. The Fireghost hounded him all the way, blocking him at every turn. Until Rowland miscalculated out of fright. He was two feet too low; his legs slammed into solid rock. And, at that speed, the crunch of bones was sickening.

And he began to slip right off the edge.

I didn't even think about it, diving for him, grabbing his wrists just as they were about to disappear. He was a dead weight, fainted from the pain. And as my arms took up the slack, and as my shoulderblades began to ache, I realised what I had instinctively done. Saved the man I hated, the man who I wanted to die. I was holding him now; the responsibility for his life lay with me. I could not bring myself to release my grip.

The Fireghost was hovering just over my head. I glanced up at it.

"Help me!"

I strained, and could not budge Rowland. My palms were becoming

slick with sweat.

"Help me! I can't do it on my own!"

It came to me again and filled my mind. Together, we dragged Rowland's unconscious form to safety.

I lay beside him, gasping, for a while. When I sat up, I was calmer than I had ever known, completely drained of anger, fear. Passive, a sheet of paper waiting to be written on. And the Fireghost was still there in my mind. There was no babble now. Just mists. Electric mists. And a face looming up through them.

It was a woman. Rather, it was two women. It was my sister Sonja, and it was my lover Lois, both of them in the same features, joined, superimposed. What should I do? Laugh, cry, scream for fear of ghosts. They were not ghosts: I had guessed that at least. I waited for them, patiently.

And Sonja-Lois spoke to me.

We love you. We are so glad to speak to you again.

"You tried before. I wasn't ready."

The terror of us, the confusion. Yes, that was one part of it. But we too were at fault. We had not become used to this joining of minds. We had not learned yet how to speak in one clear voice.

"There are the nine of you, I take it. You two, and the seven others from the first unit."

The final four were lost in the copta crash. The computer could do nothing for them.

"And the rest of you . . . ?"

I didn't mean to take them with me. It was a risk which I had meant to face alone—the first human to be transformed in that way. But we were trapped, and the computer changed us all. As the tide came in, as the first water washed around our boots, it began to alter us, just as it alters the plants. It was horrible at first, Ray. So painful. It tried to encyst us like mollusks, and that didn't work. Then, it tried to give us gills.

Insufficient oxygen. Overcooled blood. I remembered.

It became desperate. Is that a word I should use for a computer? It is organic after all. It lives. The tide was sweeping in by then. We were about to drown. And since we could not be suited to life under the sea . . .

They became part of it. Pure mental processes, chemical-electric sparks, living within a fluid medium. The solids of their bodies had been removed. Only the eighty-nine-percent water was left. And when I had dived into the sea, the Atlantan computer had attempted the same on my body. A burning pain. Mild dehydration.

The Sonja face became less distinct. Lois took precedence.

It came to me that last night, Lois-Sonja told me. I was walking on the cliffs. I was so miserable, so lost, and when it came to me I wasn't scared. It somehow made me understand. I decided to join it.

"We thought you had committed suicide," I told her. How wrong we had been. It was impossible to drown on Circe; full transformation would occur long before one's breath ran out.

This is paradise, Ray, she said. We've found the way, after so very long. There is no hunger, no disease. We do not hurt or die. We live as one with the ocean, just as the patshar live. The patshar, they are so gentle, so serene. They teach us how to ride the currents, we teach them new games. And we are with the fish and the anemones and the forests of weed. And the tide never comes for us, because we are the tide.

She became silent, lost in the wonder of it all. Sonja-Lois took over.

It's Eden, Ray. Here, right before your eyes. It's the end of the search. Come join us.

And part of me wanted to dive in, right there, right then, relinquish my human form and all the pain it brought. But there was another part which simply was not sure. Serenity? Gentleness? Was that *all* Raymond Page wanted out of life, all any human wanted? Beside me, Rowland stirred softly and moaned with pain, began to whimper like a child.

"I have to get him back to camp."

And then?

I faltered, far too long. If only I hadn't stopped to *think*. "I don't know. I'm not sure I'm ready. Please, give me time to work it out."

The computer . . .

"Will still be there. They'll need a Command directive to meddle with it seriously, and that won't come for years. I can't rush into this."

I stared down at Rowland. And Lois's voice, distinctly her own voice, filled my mind, and whether the words came from the Fireghost or from my recent memory I could not tell. But she said, *You two are very much alike, you know.*

I sensed the sadness in the Fireghost. It lifted and withdrew from me, slowly, as though hoping I would change my mind. I waited till it was lost beneath the swirling waves. And never had I felt so stunned and numb. Had I done the right thing?

Rowland was gazing up at me, unblinking, all the madness gone viscid in his eyes. There was no violence in him now, no more than

in a frightened three-year-old. Don't leave me here, his eyes said. I'm lost. I'm confused. I need help.

"Perhaps all we humans have," I murmured quietly, remembering something else Lois had said, "is each other."

I bent down and inspected the man's shattered legs, then hurried to the camp for help.

I took off in a copta the next morning, as soon as dawn broke. Rowland was strapped into a stretcher beside me, sleeping quietly, dreaming formless dreams. No expression on his face.

I couldn't hate him any more. There had been too much of him in me. The need to strive. The need to fight. A lot of pride and irrational fear. Pure, basic human drives which had turned me back from the cliffs. The *patshar* on the rocks below would never understand.

I watched the island until it had disappeared from sight. The tide was turning, coming in.

And every hour of every day, I think of Lois and Sonja and the others, so happy in the Atlantican sea. I take the silver dolphin from my pocket, twirl it round, watching it flash like ripples in the sun. And someday, even I will grow tired and crave for peace. And then, someday, I will join them.

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02A63



THE LONG WIND

by Kathryn A. Sinclair

art: Ron Logan

Mrs. Sinclair is 41, married, with three sons, two of whom still live at home—which is a four acre piece of land covered with spruce, poplar, birch, and pine, twenty miles from Edmonton, Alberta.

"The Long Wind" is her first published science fiction story; It was written while she was at the Clarion Workshop in the summer of 1981.

There was a long wind blowing. Scheer banked and curved, coming up into the current of the maelstrom, her wings cracking and booming with the stress. Up again and over. Now down, and . . . ah, there! She could feel the flow around her, hear the wind sizzle and crack just beyond the tips of her wings, but she hung in the peaceful knot of air that she knew had been there.

Below her, Rask mounted the steps of the roaring currents. She watched him with disgust-tinged admiration, cocking her head to keep him in view as she gently adjusted, curled, and lifted to stay in the tranquil eddy. Rask had skill. His control in the turbulent upper reaches was almost as good as hers. The strong muscles of his wings corded and flexed with strain. He slid up and across, then balanced and glided to another updraft. He worked his way closer.

It was really a shame, she thought, admiring the way he shifted and balanced, the way his golden hair clung sleekly to his body, the magnificent spread of his wings. It was really a shame that he irritated her so much. He had spoken before the Council for her; it was only the protection of her mother that had delayed the decision. If she did not earn a position on the council of the Ara soon, he would again petition for a mindbond with her, and she would have little say in the ruling they made.

She pictured herself going through the breeding ritual with him, but the real Rask, the one she knew in her mind, superimposed himself on the magnificent spectacle which he displayed, and she shook her head and turned her mind back to her windriding. Rask was an impressive sight, but Scheer would no more mate with him than with the zin they hunted for food.

The wind shifted suddenly, curling around in a giant eddy several miles long, and Scheer dipped and sorted the wind currents until she reached another quiet spot. She liked to come up here, to look up and wonder what lay beyond the limits to which the Ara could fly. Above her the sky stretched, purple deepening to black at the horizon. The sun had set. Overhead flared the aurora, rippling in curtains of rose and emerald. A few stars flickered through the violent display. The stars! They beckoned her to them. She was sure that they were more than just lights hanging in the sky. The Ara said that they were isci, swimming across the deepness of the heavens. As the Ara could not fly too far down, so they were not meant to fly too far up. But Scheer felt that they were wrong. The stars moved in patterns. Isci did not move in patterns. If she could just convince more of the Ara . . .

"Hello, Scheer." The voice came soft and crawling into her consciousness. Rask! In her stargazing she had forgotten him. He hung in the eddy with her, his sharp face split in a grin, his body curled into a suggestive posture beneath the steady beat and balance of his wings. She turned her head away in disgust.

He ran a claw invitingly along the underside of one of her wings. She twisted from him with revulsion at the familiar gesture, folded her wings flat to her body and dropped.

As she fell, she was buffeted by the fierce crosswinds that tore the breath from her mouth and ripped at her tightly clenched body. She knew the danger, and so did Rask. He circled above her, a diminishing speck. But she had practiced this maneuver many times, glorying in the sudden pull of gravity, the tremendous force of the atmosphere tearing at her, the danger. There was a point at which the pull of the planet would start to be counteracted by the drag of the rapidly thickening air. It was at this point that the downward plunge could be controlled. But if she miscalculated, she would be unable to pull out of the dive without injuring herself, perhaps fatally.

A few more seconds and she could start to open her wings, a little at a time, gliding downward now rather than falling, gradually opening them until their lift counteracted the pull of gravity. Her descent slowed, until she hovered and glanced around her. She had gone through Silver layer and through White and was in the glow layer beneath. Below her lay the billowing surface of Yellow. Rask was left far above; she was alone again.

She circled for a while in the solitude, combing down her rumpled silver fur, which had been stirred up by her precipitous fall, and

working through her string of curse words. No star-watching now! When she felt sufficiently composed, she banked in a lazy arc and began to search for a corridor. She flew along swirling pillars of cloud, arching up out of Yellow to catch and tear in the silverstrands of the fast-moving White above. Scheer slid up the tangled skein of one of the columns through an opening in the cloud layer, and turned in the direction of Arahome.

Ara council was in session. Voices hissed and babbled, airsacks boomed and wings snapped. Scheer appeared before them again for questioning.

"Your father was a Diver. Your mother is a Diver. It is an honorable profession. Why then do you waste your time *windriding*?" Councillor Meere was short of temper and patience today, and he put the greatest amount of scorn possible upon the word.

"I do windride, but it is not to waste time. I do more. I windride to study the stars." Scheer tried to keep the pleading note out of her voice.

"Ah, the heavenward isci," hissed councillor Droon. "The fantasy of the bubbleheads and shiftless, who do not wish to contribute to the well-being of the Ara." His voice dropped to a whisper. "Why do you ascend to 'study' these unattainable isci when the Ara have great need of those which can be caught below us by Divers?"

"With the council's pardon, I do not think that the stars are isci but are something else. . . ."

"Enough!" boomed Droon. "I will hear no more of this. Your mother will speak for you, if there is anything more to be said. She has earned her place on council."

Scheer obediently dropped below and out of the council hall as her mother's quiet voice hummed in the buzz of other voices. As a Diver, Mahr was well respected on council, but Scheer had no illusions that she could be protected by that respect forever.

Diving was a skill which few had mastered and the dangers were immense. But it would be a way to prove herself, and unless she did, she could not speak in the council or direct her own affairs.

The discussion in council became louder. Elder Droon finally brought an end to it by bringing his wings together with a thunderclap. Scheer hoped that this meant the meeting was coming to an end. Droon's son's wife was in labor in sunward sector of White layer, and Droon wished to be there for the Dropping. If he could touch the child as soon as the father caught it, and help unfold its wings, it would have a propitious start in life. Scheer didn't think

that Droon wanted to drag things out, which meant that there was a good chance they would leave the problem of Scheer's windriding for another day.

On the far side of the council drifted Rask. The looks he cast toward her were full of meaning, but she knew that he didn't dare make any improper gestures in full view of the council. She was safe enough.

She had to solve the problem soon. Rask was only the symptom. Until she proved herself among the Ara by taking a productive occupation, she would be in a precarious position. She had no say on council. Survival among the Ara depended on keeping the birth-rate at a constant level, and Scheer had now come of breeding age. The Ara's numbers were small enough that she could not refuse to take liaison with any that the council might select. It was just that *she* wished to make the choice, not some limp-winged old darkfur on the council, even if it was to be Rask.

She realized that Rask had moved closer, and was keeping pace with her at the closest limits that decency allowed. One wingspan closer and he would be guilty of a grave indiscretion before council. Of course, Rask would never make that error. She fumed at her inability to cope with him in a more direct manner.

The council started to disperse. From the east, the prevailing wind brought scents to her nostrils, the freshness of a storm, the electricity. Now she and her mother could go hunting. To the west, the streams of zin would be thick today.

It had been good hunting. Scheer withdrew the string of airsacks from the body of one of the zin and twined the glistening, pearly bubbles around her head. She and her mother had found a large pack of them fleeing downwind from the violence of the storm, the semi-transparent creatures sculling with their many arms in the top layer of Yellow. It was a bit deeper than Scheer liked to go, but her mother had insisted. *She will make a Diver of me yet*, Scheer thought.

Mahr circled nearby, the zin tied in a long string behind her, clutched in her claws. She didn't seem to notice the drag. Scheer again admired the toughness and strength of her mother. The years had not weakened the power of her wings and her fur still gleamed a bright silver, scarcely darkened yet with age. She had been alone since her mate, Scheer's father, had not returned from a dive. Scheer had been very young then, but the memory of her mother's grief, her own sense of loss and betrayal, was still strong in her. The dive

had taken her father, yet her mother returned to the depths again and again to bring up the rich meer and the isci that the Ara needed. Scheer wanted nothing to do with it. She would be a windrider, follow the stars, discover what no Ara had before her.

Mahr had taught Scheer the mechanics of the dive. It was not enough to have mastery of the downward pull of the world beneath them, not enough to have strong wings and good control in the deadly crosscurrents that swirled below. The body had to be trained to switch from the nosebreathing of the upper levels to the inflated airsack, which gave the Ara breath for an extended dive.

They had come to the lowest levels of normal breathing on this hunt, the upper layers of Yellow. Beneath Yellow was the boundary below which no one went without training and practice. Scheer could feel her body labor for breath even here, feel the instinctive urge of the airsack to take over the function of breathing, of her nostrils to close. She fought it.

Her mother's eyes showed concern. "Tomorrow we will go deeper yet, and bring back the meer which I feel are below us now. For today, you have had enough." Mahr's voice was a soft whisper in the roar of the wind around them.

"I do not wish to go deeper, Mother. You know that I have no love for the Dive."

"You will go deeper. I am weary of turning aside proposals for your welfare in council. It is time you bargained for yourself. I cannot forever protect you. Tomorrow we will dive." Her mother suddenly released the stored-up power of her wings and rose swiftly out of sight into White. Scheer followed.

The long wind blew with more violence today, tearing with insane fury across the outer edge of Scheer's world. It was all she could do to keep control as it ripped and tore around her. The aurora stretched from one horizon to the other, rippling with color, cracking with sound. The points of light she longed to see were completely hidden. If she had any sense, she thought, she would go back down and submit to her mother's will, dive for the meer and isci and establish her place on council. But she wouldn't go, couldn't face the dark depths and the darker memories of her father. He hadn't come back.

She balanced and wavered in the current, swept along with the violent speed of the wind. It would be a long way back to Arahome. Already the mental trail was fading. She had found no stable eddies to drift in, and the main wind moved with far greater speed than the lower levels. It startled her to find Rask suddenly blowing along beside her, just out of wingtip reach.

"Your mother searches for you, Scheer." His lazy voice barely reached her over the constant roar of the wind.

"Let her, and may you search elsewhere yourself." She curled a claw derisively at him, and then looked away.

His voice held more amusement. "Do you run from that which she has chosen for you? You do not honor the memory of your father."

She stiffened with anger. How dare he probe so accurately to her inner feelings! How dare he! It was as if he already held the mind-bond with her. She turned upon him with all the scorn she could muster. "Go back to your zin chasing, Rask. I do not seek confidence with you. You intrude upon my space."

He recoiled a little, but his face still showed more humor than dismay. It was as if he felt that he had already won, that the council had decided in his favor. Scheer's anger flared higher. She slashed at him with her wingtips, and when he drew back farther, she dropped as she had before. Down she sped, exhilarated as always by the fall, the controlled slowdown, the pullout . . . and found that Rask had dropped with her and was pulling out just below.

Scheer hissed with rage. Her wings cracked as she wheeled over into a steep dive and slid away down a long canyon of billowing white. Rask was a strong flier and she didn't think she could escape him that way, but she had the advantage of more maneuverability. Perhaps she could lose the pest if she took advantage of the many tunnels and canyons of White. She drove forward with strong wing-thrusts until she had picked up speed, and then angled suddenly and shot up a chimney that appeared to her left. Rask was right behind her; she could hear his booming laughter. He actually thought that she was playing! She hissed again, and swerved suddenly to the right, finding a small tunnel that she could barely clear with her wingtips. It would be dangerous to drag a wing in the viscous material of White layer going this speed. She had to cup her wings slightly to slip through, but she was so enraged that the thought of the danger was a small thing. He dared! He dared!

She dropped suddenly down a chimney that opened beneath her. Rask hurtled by overhead, unable to check himself in time, and Scheer felt a thrill of triumph. She would show him; she'd lose him completely. As the chimney opened onto the glow layer beneath White, she spread her wings again and slid along White's lower surface, looking for an updraft. There! She entered the stream of air which boiled up through White and let it lift her at tremendous speed, the walls blurring by. Relief, breathlessness, residual anger; the ebbing of the sharp edge of fear that she had balanced on, as

she had overflowed at this dangerous level.

And then, from a side corridor, there was a flash of gold. Rask! Moving tremendously fast! He saw her too late, tried to swerve, a wingtip dragged deep into the cloud, and almost faster than she could see, he was tumbling down and out of sight into the foaming whiteness below.

Her wings grabbed the air frantically as she slowed to a stop. She was numb with panic. Rask! Rask! She turned mentally and searched for Arahome. Dimly, her mind could see it, but it was far away; the long wind had swept them too far. She sent a scream for help along the mental trail toward the Home, and then circled slowly down through the heavy white to the glow layer beneath.

He was nowhere to be seen. He hadn't been able to pull out. Below her Yellow swirled and whispered, lightning flickering evilly from billow to curl. Below Yellow lay Copper, where only the divers went. She circled frantically. Rask!

She started down, hardly aware that she was doing so, adjusting as she dropped, as her mother had taught her. Deep breaths, pumping pressure into the airsack. She felt it fill, felt the mechanism of her body slowly change as it compressed and stored the air, reacting to the increase in pressure. Her nostrils closed.

She was through Yellow, deeper than she had ever gone with her mother. She hesitated. The glow layer was dark; the light from the sun hardly penetrated the many layers of clouds. Below her, Copper, gleaming and dangerous. It curled and swirled seductively, the air heavy with its electric menace. Down there was Rask. If he had survived the fall, if the crosscurrents hadn't torn his wings, if his airsack had time to expand, he would be through Copper and down to Brown, where she would need her second eyes, where the air was so thick that things crawled upon it, and the Ara could not fly; where the drag from the world below and the pressure from above was so great that it pulled out the strength and held the Diver down until the airsack emptied and the Diver died. As her father had.

Scheer circled indecisively. Perhaps it would be best to wait for the help that would come in answer to her call. But he would never last that long.

She curved into a cautious circle and began to descend, down into Copper. The drag on her wings became extreme and she found that a gradual sloping fall, using her wings as little as possible, took the least of her energy. Down. Copper rose around her. There were no openings here, no chimneys or corridors. The currents roiled through it, the butter-smooth, lazy-looking curls of cloud that slammed into

her. She fought to keep upright, to continue her angle of descent. Blue discharges of lightning ran along her wings and bounced off the ends. The noise numbed her. Her airsack labored to keep her breathing steady.

A cluster of meer twirled by in a seductively swirling current, their heads glowing faintly, their vestigial wings paddling briskly. Over and behind her fear she noted the numbers. The hunting would be good here.

Her wings ached. Copper must end soon. She could hardly see; the darkness deepened. It opened beneath her. Another glow layer, but the light here was dimmed to the point of blackness. Her second eyes opened, and she could see again, but just barely. Below her was a strange dimness that she knew was Brown. The Ara believed there were other layers below Brown. Certain animals had been seen coming up from beneath, but no Ara could live in Brown.

Scheer hung in the viscous air, searching through the dimness. Rask! Where was he? Her heart had slowed, the labored beating was loud in her ears; her airsack strained, keeping her lungs filled. She dropped lower, and slid over the surface of Brown. In the lightning flashes she could see isci in huge clusters, crawling in it. Now and then the tough back of one would appear, and then spiral back down, the many stubby legs in a continuous whirl beneath the oval body.

Brown was thick. She had never encountered anything like it, and being told about it was not the same as seeing it. She slid lower, fighting through the thickness, reaching out, touching it . . . there was no division between the glow layer and the starting of Brown layer, just a slow increase in thickness. No boundary like the upper levels. She swam through the glow layer over Brown, swam like a meer.

And then she saw him. Rask! He lay half submerged in Brown, moving slowly with the languid, deadly pull of the current. She hung over him. He was dead. His wings had been torn from him in the fall, and he had not had time to inflate his airsack. His dead eyes, the light eyes, looked up toward Copper. His magnificent golden fur moved slowly, slowly in a stately dance around his body. A group of isci were hovering, tugging at it.

Scheer curled. She tried to remember what about him had so repelled her and she could not. She tried to think of what he had done to her that was so wrong and she could not. She tried to think of her anger but it was gone. He was just . . . dead, like her father. She hung motionless for some time until a tightness in her airsack made her pull back in a sudden realization of where she was.

She had dived! She looked to all sides, her head moving in slow motion in the heaviness. Darkness was all around. She could feel the many layers above, pressing down. Suddenly, she felt that she was smothering and tried to gasp for breath, but the instincts of her body, her laboring airsack, would not let her. She tried to fly, but her wings could not move. She jerked and twisted, clawed at Brown, felt herself slowly falling. Her light eyes opened in terror, opened to total blackness spiked with blinding flashes of lightning. Her panic increased. She was smothering! She was sinking! She was being crushed! She scrambled and flailed. Her wings would not beat. She would die.

Scheer wasn't sure when it was that she came to the realization that there were strong claws holding her, lifting her. With great effort she closed her light eyes, turned and saw her mother and three other Ara. They grasped and lifted her slowly, so slowly out of Brown, up into the glow layer and gradually up toward Copper. By twos, as their laboring wings quickly tired, Scheer hanging limp between them like a baby. To open her own wings would have hampered them further. Slowly they inched upward, using their wings like oars. Scheer knew what it was costing them; she could see their struggles.

The air in her airsack was running low and she could feel her lungs start to labor. She held down the panic that threatened to edge up again and forced herself to stillness. Up they inched, through Copper, swimming blind in the oily current, feeling their way around the violent whirlpools. Her second eyes closed; her light eyes could finally see again. They came into the glow layer. Above them billowed the curls and crevasses of Yellow. They moved faster now, but Scheer knew they were approaching their limits of strength. As they rose up through Yellow, Scheer shook them away, her own wings unfolded, and they moved with increasing speed up through the glow layer and found an updraft which whipped them up through the welcome billows of White. They were breathing normally again, Scheer in long gasps as if she would never get enough air. She gasped and shuddered as her body switched over from her airsack. It had been very close.

A corridor opened before them, and they turned and winged toward Arahome. Scheer flew beside her mother. Mahr looked worn and tired.

"He miscalculated a turn in White. He was chasing me, his wing caught and . . ."

Mahr sighed. "What a price to pay for arrogance."

"I tried to follow, to save him, but I was not fast enough."

"You did what you could, but it was foolhardy to try the Dive. You did not have experience enough. We were lucky we did not lose you too."

"I never wished for such a thing to happen." Scheer shivered.

"I know, I know." Her mother was silent, and Scheer knew she was thinking of her lost mate.

And then they could see Arahome.

The long wind was still blowing. Scheer climbed up through the buffeting winds and settled into a gentle eddy. The sky glow was dim and the stars shone clear tonight. Her mind reached out to them; she held the patterns of all the brightest ones to be seen. And her favorite ones, the ones that moved, she looked for them. There were patterns and, behind the patterns, reasons.

She had spent several days in council explaining her thoughts to the elders, stringing luminous zin bubbles to illustrate the patterns her mind saw. Now that she was a Diver, she was a member of council, and the elders listened to her. And they gave her young Ara to train.

She watched the slow movement of one star across the pattern of the others. She knew she was right, knew that she would discover the secrets. Near her in the calm current circled another Ara, one of the recently mature. His eyes glowed as he followed the stars in the sky. They had glowed the same way when she had shown him the zin bubble patterns. He watched the stars, lost in them, rapt as she was.

And soon other of the young Ara would follow them. She had seen the interest in their eyes. Soon there would be others with her, riding in the long wind.



ANN ATOMIC



ON THE ISLAND OF DR. MOROSE

by Sharon Farber

art: Roland Wolff

The author is an incipient doctor herself,
studying at Washington University in St.
Louis.

Dr. Ann Atomic was in a bad mood when she returned home to Observation Asteroid. Her fiancé Osgood Ascanby poured her a glass of rare wine from the Planet of the Grapes and sat beside her.

"Tough day?" he asked.

"You can't imagine. First I had to survive an encounter with the On Call Knight . . ."

Osgood made sympathetic noises.

"Then I treated a barbershop quartet for laryngitis and papules on their labial mucosa."

"Ah yes, the four hoarse men of the pocked lips."

"Then a musician who has become stone deaf and is consequently unable to hear rock music. And finally I learned that my old friend

Dr. Morose is suffering from severe depression."

At that point the kitten crawled into Ann's lap, demanding attention.

"Osgood, why is the kitten's tail bandaged?"

"He was underfoot today; I stepped on him a couple times."

"Poor kitty—a twice-toed tail."

Osgood watched her pet the kitten, then sighed. "I hate to tell you this when you're so tired, but the Lunar Ambassador to Earth called; he needs your help. He suspects that his embassy staff has been infiltrated by spies from Sagittarius."

Ann looked thoughtful. Sagittarians are so similar to humans that they cannot be differentiated by appearance alone.

"I suppose he can't think of adequate cause to force his personnel to have detailed medical examinations. . . . Wait, there is one important species difference I can think of off-hand. One of the redox enzymes. . ."

She called the ambassador and they made their plans. The following night a party was held for the embassy staff. No alcoholic beverages were served.

The first course was a tossed salad with an oil and vinegar dressing. During the second course, the cultural attaché began to giggle. By the third course he was positively inebriated.

"That's your spy," Ann declared. The culprit was swiftly apprehended. When sober, he demanded to know how he had been discovered.

"It's your metabolism," Ann explained. "The human alcohol dehydrogenase enzyme changes ethanol to acetaldehyde. A Sagittarian confronted with large amounts of vinegar will deoxygenate the acetic acid and then convert it to ethanol. In effect, the salad dressing made you drunk and (shall we say) vinegar oiled the wheels of justice."

Leaning towards the spy, Osgood ruffled a roll of currency. "Now, wouldn't you like to tell us about your associates?"

The cultural attaché thought a while, and at last divulged the names of the other Sagittarians on the embassy staff, a total of five in all.

"It just demonstrates," Osgood said, "the old adage that you can catch more spies with money than with vinegar."

They left the embassy and walked to Osgood's car. "Oh Osgood," Ann cried, "while we're on Earth, why don't we drop in on Dr. Morose?"

"If you insist. . . ." They drove to the island in pensive silence, afraid of what they might find. The island was, indeed, in poor

repair. Morose no longer paid any attention to the activities of his manimals, sentient beasts evolved from "lower" animals. Left to their own devices, they had elected a governing council comprised of four individuals who had once been a Collie, a German shepherd, a Siamese cat, and a leopard. Thus, it was reigning cats and dogs on the island.

"Please cure him," the shepherd said. "I have this awful urge to fetch his slippers, and in his present condition he just isn't appreciative."

Ann and Osgood found Dr. Morose in his dining room. A cheery-looking robot was serving him a healthy meal.

"We're here to help," Ann said.

"Go away," Morose replied.

Ann gazed at Osgood. "Perhaps rational emotive therapy is indicated."

"He's a mad scientist—you'd better make that irrational emotive therapy."

"Mad scientist . . . Why, of course! Now I understand the source of his problem," Ann said, hastening to the kitchen and reprogramming the robot housekeeper. The robot returned to the table, snatched away Morose's nutritious meal, and replaced it with a bottle of sugary soda, a handful of tortilla chips, and a slice of pizza.

"He should be his old self in no time," Ann said.

"I don't understand," her fiancé replied, then pointed to the bottle of soda. "Are you trying pop psychology?"

"No," Ann smiled. "You see, Morose's robot was serving him a balanced menu—and everyone knows that a mad scientist should only eat unbalanced meals."

"Our work here is done," Osgood said. "Let's return to Observation Asteroid. . . ." His voice trailed off as he searched his pocket and realized that his wallet was gone.

"Oh no, we're stranded on Earth," he groaned.

"Calm down," Ann said. "Surely the rocket can fly without additional financial input."

"No! You see, I haven't the money to pay the spaceport fees, so we won't be allowed to take off. Everyone knows there ain't no such thing as a free launch."

PALINDROMES AND PRIMES

by Martin Gardner

VOZ, the computer on the spaceship *Bagel*, was getting bored. The ship was speeding toward the edge of the Milky Way to check out a newly discovered solar system, but it would be another three months until it got there.

Gigo, the youngest of the hackers in the computer shack, had just been checkmated by VOZ for the fifth time, even though VOZ had been playing without his queen.

"Must we play again?" VOZ asked while Gigo was setting up the pieces. "Another ten minutes and it will be your chow time."

Gigo glanced at the clock above VOZ's console. "You're right," he said. "And I know how tedious these games must be for you."

"I process in parallel, remember?" said VOZ. "Isn't there some unsolved problem I could be working on while we play these stupid games?"

"I'll ask the colonel," said Gigo.

The colonel was Colonel Ronald Couth, head of the ship's computer division. Couth rubbed his chin while Gigo spoke to him at lunch. "There are thousands of unsolved questions in number theory," he said, "but most of them are intractable in the sense that it would take VOZ a few million years to answer one of them. Wait a minute! There is a curious unsolved problem about which very little is known. We'll give VOZ the palindrome conjecture."

"What's that?"

"It goes back to the 1930s. You start with any positive integer. Reverse the digits to make a different number, then add the two numbers. Do the same thing with the sum. The conjecture is that if you keep doing this, after a finite number of steps you'll produce a palindrome—a number that's the same backward as forward. Of course if you start with a palindrome, you reach a palindrome in no steps. Let's try it with the current year, 2058."

Couth jotted 2058 on a napkin. After four steps of reversing and adding he reached the palindrome 56165.

"Does it always work?"

"That's just it," said Couth. "Nobody knows. If you begin with an asymmetric two-digit number, and their digits add to less than 10, you obviously get a palindrome in one step. You also get a palindrome in one step if the digit-sum is 11. If the sum is 10, 12 or 13, you reach a palindrome in two steps. If the sum is 14 it takes three

steps. If they add to 15 it takes four steps. And if the sum is 16 it takes six steps.

"What about 17?"

"Seventeen is the maverick. Only two two-digit numbers have a digit sum of 17. They are 89 and 98. Start with either number and it takes 24 steps to make a palindrome."

Gigo entered 89 on his pocket calculator. After the 24th step, the readout showed the palindrome: 8813200023188.

VOZ was delighted with the problem. At once he began to check the integers in counting order. Every number reached a palindrome in fewer than 24 steps, except for 89 and 98, until he reached 196. After a few minutes VOZ had performed 1,000 steps on 196 without encountering a palindrome. It took several hours to extend the calculation to a million steps. Still no palindrome.

"I could go on to a billion," VOZ said to Gigo, "but I think it would be a waste of my time. I ran several sophisticated probability checks while I was calculating, and the chances of ever hitting a palindrome are close to zero. It's strange. I may try writing a program to see if I can prove the conjecture is false."

The conjecture is believed to be false by Charles W. Trigg, the first to discover that 196 is the smallest number that could be a counter-example. The conjecture has been proved false only for binary notation, and any notation based on a power of 2. The smallest binary counter-example is 10110, or 22 in the decimal notation. It produces an asymmetric pattern that expands in a systematic way that precludes the formation of a palindrome.

Another famous conjecture about palindromic numbers is that there is an infinity of palindromic primes. The first such prime (not counting single-digit numbers) is of course 11. The sequence continues: 101, 131, 151, 181, 191, 313, 353, 373, 383, 727, 757, 787, 797, 919, 929, 10301, . . .

Note how the sequence jumps from three-digit primes to five-digit primes. Can you prove that, except for 11, no palindrome with an even number of digits can be a prime? The simple proof is given on page 63.





A MEETING OF MINDS

by Ardath Mayhar

art: Robert McMahon

The author is, she says, a devout unorthodox, a grandmother, and a hard-headed East Texan. She writes SF, fantasy, Westerns, psycho-horror, plain horror, and a newspaper column that will probably get her lynched. She'd rather write than eat, lynched or not. Her books *How the Gods Wove in Kyrannon* and *The Seekers of Shar-Nun* will be out shortly from Ace Books.

The actinic green of the sunlight through the shuttle-ports turned us all a shade of upchuck puce. Larrimer, my second-in-command, looked even worse than Genet. Only T'l'hr, whose own sun was similar to this, retained his natural verdant hue. Of the four of us, I knew that he, with his special talents, would probably be most useful in this highly important negotiation.

The shuttle shuddered as Octavius brought her in. We were well strapped and cushioned, knowing his bravura tactics of old, and we found ourselves down at the shuttle-port, more or less intact.

It couldn't really be called a port. It had been designed, we had been told, as a playing-field for some obscure game the inhabitants played on occasion. It held no structures, only randomly-placed humps of soil topped with tufts of stiff and prickly vegetation.

Octavius killed the field, and I heard the whine of the airlock mechanisms. Glancing from the port while Genet and Larrimer gathered up our belongings, I saw a strange array of beings about the field. The sun-glare was enough to distort my impression of them, however, and I hurried to get my portfolio and get out there. The compulsive fascination of my work was pulling me toward this new assignment.

We were thankful for the Tryllabi. They had described the place to us, as well as arranging everything in advance. Being telepathic and highly tactful, they are the point-men (not men, of course, but that's another story) for the Initial Negotiation Teams across this system, which teems with dissimilar species, all of which are almost equal in mental capacity.

The Tryllabi, after assuring us that preparations would be made for our accommodation, had whispered something into my mind, alone. I was still mulling it as I debarked.

"These beings know the reputation of *Homo sapiens*. They care little or nothing for your culture, but they are tremendously prideful. We received from them an overwhelming sense of purpose with regard to the Initial Negotiation Team. They want to set a precedent . . . in their favor. Watch them!" I had been at my work long enough to realize that there is no way of anticipating the thinking of alien races.

We snapped on our masks to shield our eyes from the sun and made our way down the ramp onto the field. The natives came forward to meet us, and even through the dark masks they seemed terribly strange. Ten or twelve feet in height, they swayed and rippled through the light air of Rosten I. But that wasn't the thing that startled me. They seemed to be fluorescent, their willowy bodies

glowing in randomly occurring patterns of color. It was difficult to determine any overall shape, so distracting was the play of color over their many-branched bodies.

The effect was quite beautiful. I went forward and touched my hands to my ears, as the Tryllabi had instructed. Light rippled across the frondy surface of the individual I had approached. It swayed in the light breeze, its ferny growths fluttering. I felt too plain and unadorned as I flapped my hands in greeting and hoped they would take the intention for the deed.

No word was spoken, and when I had sorted out the features hidden among the colored patterns, I realized that they had no mouths. An arc of five eyes, yes, across what might be a brow. Something that might serve as heat-sensors. But no ears and no mouth. The Tryllabi had warned us that communicating with them would be difficult. I could see why. Our computer-translator would be useless . . . but it had been that warning that had caused me to bring T'l'hr. His kind could communicate both telepathically and verbally.

At my gesture, the K'r'ss stalked over to stand beside me, his three-kneed legs giving him a spiderish gait. "We'll need your talents here," I told him. "If we are to get supplies of longevity-weed from them, we must find out what they will take in trade. According to the Tryllabi, that won't be easy . . . and the I.N.T. schedule gives us only a week to set up the initial treaty. They want us on Carver II in short order. This may be the most important negotiation of all our careers, T'l'hr. See what you can do."

The K'r'ss managed to move his many-jointed limbs in a manner somewhat similar to that used by the creatures we faced. As even the Tryllabi hadn't been able to learn what they called themselves, I had no idea what to name them. Then came a flash of inspiration. I decided that in my reports I would refer to them as the Frondists. That settled, I turned my attention to them and found that they were paying close heed to what T'l'hr was doing.

They looked, in their concentration, like a wind over a field of vari-colored grasses or an undersea scene of weeds flowing in a current. Spectacularly beautiful—but we were not here to be entertained. I perched on the corner of my case of personal supplies and hoped that T'l'hr, among other things, was finding out where we would stay.

At last he turned and stalked back to my side. "They have built for our exclusive use a hut. They need no such . . . they root themselves at night and need no shelter from the elements. They also

receive nutrients in that way. They need neither food nor housing. It is hard to realize what that could mean. The effort our kind expend in getting necessities is used by them in pursuit of goals we cannot imagine."

I shook my head. "And that means they probably won't want or need power-sources, exotic foodstuffs. Even medications! Their body chemistries must be totally different. And what else is there to trade?"

Tl'hrr looked about. Larrimer and Genet had been listening closely. I could see determination on their faces that must match that on my own. This was the first source of a really effective longevity drug to be found. We could not and would not admit defeat until every possible alternative had been explored to the fullest.

Now the Frondist leader was waving emphatically. Tl'hrr said, "He wants us to follow him to our quarters. After we rest a bit, they have arranged a special entertainment for us. Tomorrow we will negotiate. They have rigid social usages, and they never conduct serious affairs immediately. It would be a breach of etiquette."

The hut was a very different sort of accommodation from that usually given our kind. It was large, airy, and seemed to have been grown, rather than constructed. Its frame was a heavy-stalked vine, whose rubbery leaves walled and roofed it. Small, scented flowers decorated the interior. An interesting apartment.

It was large enough for all of us to sleep in comfort, and a special spot seemed to have been arranged in which our K'r'ss friend might fold himself into his resting mode. The sun-heat could not penetrate the living roof, and we all disposed ourselves as best suited us and rested for a couple of hours.

When the sun had gone down behind the immense forest of palm-like trees that dominated the entire landscape, I woke, refreshed, to find Tl'hrr standing, half-unfolded, beside my pile of grasses.

"I dreamed," he said. "Now I know how the Frondists communicate."

I rose, excited. "Wait! Let me activate the recorder. This is important." I thumbed the control, activating the mechanism that would feed the information directly into our traveling computer.

The K'r'ss twitched his jaw, equivalent to a shake of the head. "I don't know if it is all that useful," he said. "They communicate by means of color and pattern codes. That is the reason for the fluctuation that has no regular system of design or hue. It isn't biological; it's intellectual. The recurrences happen when the same idea is expressed more than once. Their minds work very strangely,

and the codes are so complex that ne would have to have been born one of them to comprehend them fully. I can attain a small amount of mind-contact with them, but I comprehend about as much of their thought as a year-old child or an eight-month-old K'r'ss understands of a philosophical debate. They are abstract thinkers to rival any in our system."

I groaned. If he could have managed it, T'l'hrr would have groaned with me. As it was, he twitched again and unfolded himself fully. We looked at one another sadly. Then I turned to shake Larrimer and to nudge Genet. It was time to wash and dress in our formal uniforms.

We had waited no more than a few minutes when our guide came to conduct us back to the game-field. Octavius had taken the shuttle back to the waiting ship, and the area was clear and ready for whatever "game" these strange people might see fit to play on its hard-packed gritty-gray surface.

Piles of mossy stuff had been arranged for those of us who required seating. T'l'hrr braced himself comfortably on half-folded legs beside us, and four of the Frondists came to stand beside us. After a moment I realized that they were not really standing, however. From the corner of my eye I could see tendril-like toes go rooting into the grit, while the rest of the colorful frames swayed dreamily in the freshening breeze.

The playing-field was now the scene of much activity. Some twenty of the Frondists were wavering about on its surface, apparently doing something similar to choosing sides. When the thing was settled, ten took themselves off to the hummocks I had noted on landing. There they rooted themselves comfortably among the vegetation and spread all their "foliage" to the wind.

The other ten arranged themselves in a sparse circle about the field, which was round and some three hundred feet in diameter. There was a sudden commotion at the edge of the forest. Two Frondists approached carrying roundish shapes that squealed and wriggled frantically. When the things were set down in the middle of the field, I could see that there were six creatures there . . . something like old-world pigs.

The carriers retreated into the crowd. The six animals huddled for a moment in the space in the center of the field. Then the nearest of the rooted players flashed a startling shade of purple, and the creatures scattered in dismay. At once there was activity. As the dashing shapes of the animals passed the hummocks, the resident-Frondists swayed deeply and deflected their courses with trailing

tendrils. The panicked creatures darted this way and that, their directions determined by the participant Frondists in much the way a tennis ball's flight is directed by the racquet of the player. The extra ten players were commissioned to prevent the escape of any "ball" from the arena.

Evidently we were privileged to see the best players of Rosten I, for only one of the pig-creatures made it to the perimeter, to be sent, squealing, back into the game. I marveled at the reflexes, or whatever analog of a nervous system the Frondists possessed, that allowed such speed and flexibility. For, at last, every one of the six was "batted" into the central circle, there to collapse with exhaustion.

There followed what I construed as a debate or competition fixing upon the relative merits of the players. When the six best (I assumed) had been determined, each of them was given one of the animals, which they bundled into a netlike arrangement of fronds and carried away, evidently in a state of dreamy exaltation.

T'l'hr now engaged in a long and intricate discussion with one of our four attendants. There was much waving of jointed arms and wagging of foliage-like appendages. Colors chased one another across the Frondists with all the abandon of the chase of the pig-ball creatures. After a long while, the K'r'ss turned to me.

"As well as I can determine, the six finest performers are awarded the prizes. They take them to their rooting-spots, snuff the life from them, and bury them. They supply intoxicating amounts of fertilizer or food or whatever you might call it. The winners stay drunk for weeks."

That left me with something to think about that night. For all the comfort of the hut, I found myself troubled by the sport, though of course my own species had conducted, in its disreputable past, far worse games.

By the next morning I had shaken off my fancies and was ready for business. In my case I had catalogs of every sort of exportable item our System afforded: technology, entertainment, foodstuffs, intoxicants, erotic enhancements, everything the combined cultures could produce. Among all those things must be something that would allow us to come to a meeting of the minds with our hosts. The longevity-weed, the Tryllabi had determined, was useless for that purpose to the Frondists. It was simply a weed to them.

I found myself hopeful as we settled into the midst of a group of the tall beings. T'l'hr went to work at once, focusing his thoughts on our needs and our willingness to work out any possible trade for

the precious stuff. I relaxed, while he sweated (though K'r'ss don't sweat—they ooze green ichor) and semaphored.

The day blazed toward noon. I was grateful for the protection of my mask, as well as for the ample shade provided by the forms of our surrounding Frondists. We three humans sat on piles of grass, enjoying the occasional breeze caused by their gesticulations.

At last, well before the sun had reached the westward forest, the K'r'ss came to fold himself beside me.

"Honored Hillaire, we have been set an impossible condition. They will grant us this weed. They find little use for it, and it is principally a pest to them in their horticultural efforts. But they will not give it, for they know that our System regards those who give things away as fools from whom it would be easy to take things they do *not* want to give. There is nothing in our catalogs that they want or need. They live in their minds, creating and dismissing more amazing things than we can dream of. They distrust our combined system of species and want something that will assure all that they are not to be trifled with. There is one thing they will agree to trade the weed for." His stalked eyes were glazed, behind the light mask that he wore.

"What is it? We will agree to anything. This is the most important negotiation any of us have ever been entrusted with, and we must not fail. For ourselves, or for our races. I agree in advance!"

He swiveled two eyes toward me. They looked shocked. "But they want you! For their game! They think a human might well provide the most exciting drunk ever achieved by one of their kind. It is in these intoxications that they find the incredible ideas that entire populations spend months and years in exploring and refining.

"They say that your decision to sacrifice yourself for the good of your species (as well as others) would prove to them that our System acts in good faith."

Well. I sat there, motioning him and the others away. I am a professional. I knew that the I.N.T. would agree totally if I refused. No black mark would go on my record. Nothing would be said. Yet . . . my parents before me were Diplomatic Corps to the bone. I knew what they would have done—indeed, what my father had done as his last act in the Service. I could not do less. No matter that I was still fairly young, not too bad-looking. No matter that life would be fascinating, work compelling, the very act of breathing intoxicating for many years yet. I knew what I must do.

"Tell them that I accept. I would like some time to arrange my affairs and to file my reports. I trust that you made it clear that any

breach of faith would be viewed very harshly by my superiors?"

Larrimer gripped my elbow. Genet touched my shoulder. "Good man!" said a voice in my ear. T'l'hr's eyes oozed amber, as he added his touch to theirs.

The game will be played in seven standard days. This addendum to my formal report is for your eyes only, Shan-Dir.

Long life to you, Sir. And to my species.

SOLUTION TO PALINDROMES AND PRIMES

(from page 55)

Here's the quickest way to show that no palindrome, except 11, can be a prime if it has an even number of digits.

A familiar method of testing any number for divisibility by 11 is to add all the digits in even positions, then add all the digits in odd positions. If and only if the difference between these two sums is 0 or a multiple of 11, the number will be divisible by 11. When a palindrome has an even number of digits, those in the even positions will duplicate those in odd positions. The two sums will be the same, and their difference will be zero; hence the number will be a multiple of 11 and therefore composite (not prime).

While VOZ was checking 196 to one million steps, he searched his memory bank for some palindromic number curiosities that he thought would amuse the computer hacks. Here are some he found:

The only known asymmetric number that produces a palindrome when cubed is 2201. Its cube is 10662526601. According to VOZ, this was first noted by Trigg in 1961.

In 1980 Harry L. Nelson proved that the smallest palindrome prime containing all ten digits is 1023456987896543201.

The largest known palindromic prime, discovered by Hugh C. Williams in 1977, consists of the digit 1 repeated 317 times. It is called a repunit prime. The only other known repunit primes are 11, and the primes formed by 19 and 23 units. The number formed with 1,031 units is probably the next largest repunit prime, but this has not yet been proved.

It is trivially true that no prime can be made by repeating any digit other than 1. But can you prove that a repunit prime must have a prime number of digits? The almost trivial proof is on page 112.



Mr. McDevitt and his wife Maureen are both from Philadelphia. He's an ex-cab-driver, an ex-naval-officer, ex-English-teacher, and so on. At present, he is a customs inspector on



THE FAR SHORE

by Jack McDevitt

art: Odbert

the Canadian border. He and his wife have three children, two cars, and lots of heating units to cope with the forty-below temperatures of North Dakota. This is his second science fiction sale.

The moonlight was bright on Patricia's grave. Rodney Martin felt the moisture in his eyes, threw a final spadeful of earth, and groped for a prayer to a God whose jurisdiction surely ended somewhere south of here. Behind him, in the dark, the surf was a muffled boom.

The wind blew against him.

It seemed to him now that he had never known her free of pain. He had worked with her aboard *Alexia* for almost three years; yet her lifetime, for him, was bracketed between this night, and that terrible moment on the dark, ripped bridge of the stricken starship, when he had come upon her, mouth full of blood, face pale behind her helmet's plexiglas.

Grief twisted his features.

He was reluctant to leave, and stood a long time listening to the forest sounds and the ocean. The Moon drifted above the trees, not the barren rock of Earth's skies, but a large blue-green globe of continents and water, its arc softened in its shimmering white clouds.

There was a slight chill in the air.

After awhile, Martin shouldered the spade, and walked slowly back toward the beach. The trees fell away, replaced by tough, fibrous plants rooted in stony soil. He looked out at the ocean, on which no ship had ever sailed.

Long waves broke and slid across the sand. Ahead, the glow from the Monson Dome glimmered on the water. He'd been careful to turn the lamps on before leaving, but now it seemed distant and cold. It was the only artificial light anywhere along the coastline. It was in fact the only artificial light on the planet.

He tightened his grip on the spade, and walked past a massive boulder thrown up on the beach during some long-ago cataclysm (he assumed). It was the size of a small apartment house, its lower sides smoothed by the tides. Beyond lay the escape capsule, cool and round and black, an enormous bowling ball in the sand, forming a kind of matched pair with the rock.

He climbed the low ridge behind the capsule, and was home. The Monson was actually four domes, three smaller ones, at right angles to each other, connected by twelve-foot-long tubes to a primary central bubble. The entire structure was a bilious opaque green. Not exactly a Sea Island townhouse, but comfortable, designed to withstand extreme temperatures, assaults by dinosaurs, corrosive atmosphere, whatever. The ideal survival structure, sufficient to house the entire eight-man crew of *Alexia*. He would have a lot of room.

And a lot of time: possibly enough to sort out what had happened.

Screen failure, he suspected. God knows they had blinked out often enough before. There was considerable debris in the area, and the ship might simply have gotten corked by a good-sized rock.

Whatever it was, the hull had come apart, and apparently dumped everyone but the two sleepers into the void. During those last frantic minutes, with power and gravity gone, and the star well swirling beneath his feet, he'd searched *Alexia's* spaces, and found only Patricia, whose first fortunate response had been to launch Datapak.

Sleep did not come easily. He tried to read, could not concentrate, turned out the lights, and stared at the ceiling. The bedroom windows were open: the surf thundered and hissed in a rhythm which blended with the sound of the spade in the hard earth. Patricia's twilight eyes watched him, her gentle features bright with fear for him. At the last, he knew, she had tried to pass him her courage.

Martin was up early. Tired, angry, he scrambled an egg for which he had no appetite, added toast and coffee, and then went for a swim. The ocean was cool. After a while he came in, and stood knee-deep in the surf, enjoying its inconstant tug, feeling it pull the sand from around his toes. The sea was blue and salty, indistinguishable, as far as he could tell, from the Atlantic. Strands of weed wrapped about his ankles; things very much like sandcrabs washed in, and immediately buried themselves amid tiny fountains of water. The white beach, punctuated with heaps of slate gray rocks, swung in a wide curve for miles, and then vanished round the edge of a promontory. Inland, wooded hills mounted in successive ridges westward to the foot of a distant mountain chain. A lost floater drifted over the breakers and, as he watched, was picked up by a gust of wind, and carried back into the forest. The floaters were chlorophyll-colored airbags, apparently airborne plants, resembling nothing so much as lopsided leathery balloons, complete with an anchoring tail. Seabirds, longer, flatter than gulls, but with similar screams, wheeled overhead. When the wind was up, and in the trees, the entire seascape churned.

Was it really so, that no other mind, *ever*, had contemplated this?

He slept most of the afternoon, and awoke feeling better than he had since the accident.

Survey had nothing between here and home. It was 74.6 parsecs to Earth. Empty space every inch of the way. *Alexia's* distress signal, riding its subspace carrier, would cross that vast ocean in 26 months and some odd days, which meant that he could expect a rescue party

in no less than four and a half to five years.

He'd be in his thirties by then. . . .

Fortunately, food was no problem. Storage lockers on board the SARC, the Sakata-Avery Rescue Chamber, held enough hamburgers and flashlight batteries to maintain eight people six years; that is, to cover the worst possible case. He had weapons, though this world so far had revealed no predator dangerous to him.

And he had a pleasant beach home, in a location that, on Earth, would have been well beyond his means. Rent-free, and with his pay piling up.

That evening he dragged a chair outside, and sat with a novel open on his lap, watching the Sun dip into the mountains. It was whiter than Sol, slightly larger, in reality as well as in appearance. When the leading edge touched the horizon, Martin set his watch at twelve o'clock. He needed a more precise measurement of his day, which was approximately 26 hours.

The SARC had come down in the Northern Hemisphere, and he'd steered for a temperate zone. The planet was entering that portion of its orbit in which his chosen area would be tilting away from the Sun. That meant autumn was approaching.

He would need a calendar. This world circled its G2 main sequence primary in seventeen and a fraction months by terrestrial reckoning. So if he wished to keep only twelve months in his year, he'd have to assign 40 days or so to each.

Declination was only eleven degrees. So, judging by current weather, he could expect a mild winter.

Had he overlooked anything? He had an abundance of solar energy, with backup systems, if necessary. The shoreline gave no indication of unusual tides, sudden inundations, anything of that nature.

The SARC possessed an extensive film library: complete runs of the most popular TV shows of the last century. Mostly they were domestic comedies, down home situations, reasonably well-written, emphasizing traditional values. There were quiz and discussion shows, and other programs of an educational nature; and a complete run, ten years worth, of *Brandenburg and Scott*, a "sociodrama" in which two wisecracking Government agents helped people adjust to assorted problems arising from economic dislocation, overpopulation, divergence in religious views, and so on.

He had fifty years of the World Series, and a lot of horse races. And some books: *The Bible* and *The Koran* (that seemed odd), a virtual library of contemporary romances and thrillers, an encyclo-

pedia, *How to Write Effectively*, the *Toastmaster's Joke Book*, and a copy of Lord Byron.

No wonder people had gone crazy before being rescued.

Most of the material was on tape, but the two religious volumes, Byron, and a couple dozen of the novels were actual plastic-bound books, which meant he could take them out to the beach with him.

He also had a radio. There was, of course, nothing to listen to other than the hourly distress call put out by Datapak, his private orbiter. Datapak was a highly-sophisticated cluster of antennas, receivers, and transmitters, aimed at Earth by an on-board computer, beeping across hyphenated space. It was a state-of-the-art unit, constructed specifically for Survey, deriving energy from both solar radiation and planetary magnetic fields, capable of transmissions of extraordinary power, even by Martin's standards. Its receivers were designed to pick up stray whispers of signal, electronic sighs to be filtered and dissected, the results channeled into the computer for analysis, enhancement, and ultimate restoration. It would, one day, lead his rescuers to him.

The controls for the orbiter were enclosed in a white plastic case, plugged into a display screen, mounted on his coffee table.

Martin's front yard had become humanity's most remote outpost. It was half again as far as Calamity, on the other side of Sol.

A squirrel-like creature sat on its hind legs watching him. He went inside and returned with some nuts, one of which he tossed to the animal. It advanced with some caution, took the nut into its mouth, glanced briefly at him again, and vanished back into the scrub.

That squirrel, with its quick black eyes, was as high a life-form as men had found, after examining several hundred terrestrial worlds. Life was everywhere, on frozen moonlets, even on some of the gas giants. But intelligence was uniformly absent.

Consequently, the Earth was reassuming its Ptolemaic position as center of the universe. The Theological Implications, as people were now fond of saying, were obvious. The primordial soup, stirred centuries ago by evolutionists to evict the Creator, had acquired an extra ingredient. The position that Man was a direct result of divine intervention was once again respectable; the numerous empty garden worlds, like this one, might almost have been prepared specifically for his use. Martin knew what all this suggested to people back home. But to him, here, the skies were silent, empty. Perhaps even, as *Alexia* had discovered, hostile.

The Survey program was dying. Men had more real estate than they could use for the foreseeable future. Expeditions were expensive, ships were wearing out, and the Government could see no return for its money. And there was the monotonous sameness everywhere: the wonder had gone out of exploration. Unless someone, somewhere, encountered a strange black ship, or dug up an artifact, the Great Adventure was at an end. Moreover, it was unlikely that the political power structure wanted any unsettling discoveries. There would probably be a general sigh of relief when the last Survey vessel returned emptyhanded from its last flight.

No new unit had been added to the fleet in thirty years. Equipment was run down, and parts were scarce. In fact, he thought wearily, if the truth were known, the loss of *Alexia* would probably turn out to be attributable to a busted hose somewhere.

He missed Patricia.

On the third night after her death, he was oppressed by a deep sense of unease. Somewhere, in the hills, out at sea, he would have liked to see a light.

When it got to be too much, he put on a talk show. And without knowing why, he bolted the door.

Everett Radcliffe, stranded on the back side of the Moon for six months after a series of improbable accidents had carried off his two colleagues, had heard footsteps behind him the rest of his days. Will Evans had taken his life after four months in a prototype of Martin's shelter. Myra Greenway, for whom the syndrome was named, was adrift for a year in a SARC, never close to a planetary surface. She swore that something had tried continually to get at her. Brad Kauffman lived eight months alone in a crippled cruiser after his partner had died, and had refused, after his return to Earth, to come out of his house at night.

There were other cases.

Something deep in the soul does not like infinity, and does not like solitude. Cut whatever it is that ties a man to the rest of his species, plunge him into the outer dark, and you will not get him back whole. Basic doctrine.

Martin tried not to think about it.

Standard procedure was to watch television, cultivate hobbies, keep occupied. He glanced at the screen, on which an aging beauty was attempting to leer at the host.

He could collect rocks.

Martin was not a man easily frightened: he'd intervened in gang assaults, did not fear speaking to large groups of people, and had ridden the great starships into the unknown. Nevertheless, he was sitting behind a locked door.

STATUS REPORT 002 ALEXIA 090857 LOCAL TIME (EST): MASON DEAD OF INJURIES SEPTEMBER 3.

He thought of Patricia's family, two years from now, awaiting this, and added: PEACEFULLY. He poked in his name, and hit the transmit.

The next morning was gray with rain. He inserted the chess tape, got bored, and tried a novel. After lunch, he sat down listlessly at the radio, pointed Datapak's antennas at Sirius, and turned on the receiver. The speakers crackled with static.

Hello from God.

Outside, the trees bent under a stiff wind, and the ocean was choppy. Oblivious to the weather, a groper ambled amiably along the treeline, its oilskin hide glistening. It probed the branches with long, flexible arms for the yellow fruit on which it seemed exclusively to subsist.

He'd awakened this morning with a wisp of recollection, a dream, something not quite remembered:

He was a boy, alone in the house in Atlanta. And frightened by the shadows and dark places outside the living room. He'd put on the TV, and looked through the dining room at the gloomy doorway to the kitchen, with its exits opening out back and into the basement. He'd sat for awhile, trying to pretend it was not there. Then, he had turned off the television, taken a book, and crawled behind the sofa.

Had it really happened? As he reached back, details took shape: it had happened more than once.

He rotated the orbiter's antenna cluster slowly, randomly, and set the scanner to range over a wide band of frequencies. There *was* something constructive he could do: intercept an artificial signal: a navigational beacon in the vicinity of Betelgeuse, perhaps, or a weather report from the Pleiades. Do that and they'd build a shrine on this spot.

He sat through most of the afternoon, listening to the cosmic racket, wondering whether he would recognize an artificial signal.

Tiring of it, Martin returned control to the on-board computer, which obediently tracked back across the sky and locked on its primary target. The signal changed.

It was a blip, a rhythmic murmur gone so quickly that he wasn't sure it had been there at all. He reversed the scanner, and was listening to a jumble of signals, nothing he could make out, but different in quality from the stellar transmissions he'd heard previously. He used the filters to isolate the strongest signal, and then boosted it. It became a piano, and a voice:

. . . a lipstick's traces,

An airline ticket to romantic places,

And still my heart has wings;

These foolish things remind me of you. . . .

Martin frowned, smiled, shook his head.

Rescue ship nearby? That brought a momentary surge of elation, but he knew it could not be. He got up anyhow and went outside to see if anything was moving against the stars. The piano sounded very far away.

. . . A telephone that rings, but who's to answer?

Oh, how the ghost of you clings! . . .

The singer finished to a burst of applause, and the melody shifted smoothly.

*Thanks, folks, and goodnight from all of us here at the
Music Hall until next Sunday, when we'll be coming your
way again with more of America's favorite tunes.*

More applause, music up in volume, and then a fadeaway to still another voice:

*This is CBS, the Columbia Broadcasting System. News is
next, with Waldo Anderson.*

Old Earth: he was picking up carrier waves that had left Earth more than two centuries ago!

Anderson arrived in a clatter of electronic gimmickry, introduced his lead story, which concerned a local miscreant, and gave way immediately to a woman with a passion for antacid tablets. Then Anderson returned, speaking in a rich, cultured voice:

*The Willie Starr case went to the jury today. Starr is one of
two men accused in the triple slaying last March at the
Graybrook liquor store. Starr, who has remained impassive
throughout the trial, faces death if convicted. His alleged
partner, Joey Horton, has already . . .*

Martin sighed, and turned it off. He had found his alien civilization.

The sun broke through, and the day warmed. Languidly, Martin stripped, and gave himself to the sea. The water had turned cold.

He swam out beyond the breakers with sure, swift strokes, turned, and surveyed his world, rising and falling with the waves.

It was like one of those early summers off St. Simons, minus a few things: the white frame houses, the beachfront restaurants, the copperskinned half-naked girls stretching in the warm sun. Now: to have someone, anyone, any alcoholic, rundown, life-battered cynic with whom to share an emotion, an idea, *a fact*.

It will be unseasonably cool tonight, Frank.

Tears of self-pity mixed with the sea.

Later, wrapped in a terry-cloth robe, he sat on the beach with an interplanetary, a novel set amid the confusion, hardship, and lawlessness of the early days of extraterrestrial settlement. The author, Reginald Packard, had grown wealthy cranking out these historical romances.

Martin did not normally read such things. But he had become engrossed in the book over breakfast. Now, however, as the Sun began its long slide into the mountains, he found that his eyes kept wandering from the rows of neat print to the shadowy places among the trees.

Something was in there.

He shuddered, and pulled the robe tight around him. A long wave unrolled and ran up the beach. He could not get his eyes off the edge of the forest.

Nothing moved.

The Dome was three hundred yards away. A long run in the sand. How easily he could be cut off!

His heart pounded.

The wind blew and the trees writhed.

Greenway, he thought. And he understood the woman, hysterical in her capsule somewhere beyond Centaurus, while something with sharp teeth and feral eyes prowled the outside, slaving at her through the viewscreen, gnawing at the airlock.

His heart beat so wildly that it was hard to breathe. And suddenly he was on his feet, churning through the loose sand. He did not look back, but kept his eyes fixed on the Dome. He fell and, in slow motion, rolled over and over. Then he was up, running again, pumping wooden legs.

When he got back to the Dome, he bolted the door behind him, set the shields in place, drew the blinds, and collapsed. His cheek was badly scraped. And he'd lost the book.

* * *

That night, still trembling, he concentrated on working out a search pattern for Datapak. He would focus on Sol, and move out in one-degree blocks, centered on lines running in the four prime directions. When that was completed, in a year (or two), he could return to his base, and search along lines radiating at 45 degrees.

And if, by some remote chance, he found what they'd all been looking for so long, they'd have to come get him. . . . Martin's eyes narrowed at the thought that had surfaced, that he'd refused to consider. Expense and inconvenience notwithstanding, the Service had a tradition to maintain. He had nothing to fear.

Periodically, he crossed the room and peered out through the drawn shades.

Ignoring his system, he wheeled the antennas around the sky. He turned the volume off and transferred the signal to the display, where it erupted in a sharp staccato of color. Then, although it was not his scheduled night, he opened a beer, drank half of it, and threw the rest across the room. A lamp went over, and the bulb burst. The sudden pop startled him.

Deciding that chatter would at least be company, he switched back to the terrestrial radio station and listened to "Our Gal Sunday" and "Life Can Be Beautiful." His own tension lessened: the shows had a small-town charm, and the characters seemed generally virtuous and vulnerable, if not bright. Sunday's voice had a peculiar vitality, a quality of moonlight and laughter. He tried to picture the actress, and decided he would have liked to know her.

And there was more news:

. . . Governor Dewey at a press conference this morning stated that police are closing in on Buchalter, and that his arrest is imminent. Known in gangland as Lepke the Leopard, Buchalter jumped bail two years ago. Onetime boss of New York's protection racket, Lepke is believed to be . . .

He experimented with other terrestrial stations. Most were in foreign languages; others were broadcasting exclusively in morse code. He listened to "Ma Perkins" and a quiz show; and had a late dinner with "Terry and the Pirates" and "Jack Armstrong."

There were supplies to be got in from the capsule, a job he'd been putting off. He looked across the empty beach, turned up the radio, unlocked the door, and forced himself to walk. On the way back, arms full of dehydrated foods, he heard a familiar name:

Berlin announced today that Polish authorities were continuing to expel German citizens. The official Nazi newspaper Volkischer Beobachter reported two men killed near Stettin this afternoon. Both men were German citizens, and were said to have been fleeing a Polish mob when they ran out onto a highway, and were struck by a bus.

Chancellor Hitler, speaking at a party meeting in Munich, labeled the incident quote yet another provocation by anti-German leftists in the Polish Government unquote. He called on President Moscicki to intervene, and warned that quote German patience is not without its limits unquote.

Closer to home . . .

Martin, of course, had heard of Hitler, the twentieth century warlord, pre-atomic age; frequently associated with group-societal psychoses.

The newscast went on to describe a quarrel in Congress over the Neutrality Act, a bungled attempt at an armored car holdup, and an argument at a school board meeting. Tomorrow would be sunny and hot. The current heat wave was going into its sixth day. And there were some baseball scores.

Martin hadn't realized that baseball was so old. Some of the teams were the same, but it must be a strange version of the game they were playing, in which a team might score only three or four runs.

He slept that night with the shields up, though he knew, *really knew*, they were unnecessary.

In the morning, he opened the windows, unlocked the door, and went looking for the Packard novel, which he found where it had fallen. He stood a long time, studying the tree line which had appeared so ominous.

He tried to pick up "Our Gal Sunday" again next day, but failed to take into account the two-hour-plus time differential resulting from the longer day. But there were other serials. He listened with interest: the problems faced by the characters were of a personal nature, rather than the social struggles to which he was accustomed. These were people for whom there might have been no outside world, but merely the thrust and parry of love and lust. It was a refreshing change.

He passed a sizable part of his afternoon with Xavier Cugat and the Boys in "the Green Room of the beautiful Grant Park Hotel in downtown New York." Despite the innate vitality of Latin adap-

tations, there was about everything a sadness, a sense of things lost. Between songs, behind the announcer's voice, Martin heard the low murmur of conversation, the clink of china: fragile place of glass and laughter.

Berlin announced that two unarmed German passenger planes had been fired on by Polish fighters near Danzig. One had crashed in a field, killing all on board; the other had carried a cargo of dead and wounded back into German territory. Hitler was said to be furious.

There were also reports of an attack on a German border station. The Poles denied it all.

Martin understood that these events were not real, that the people in the Green Room, sipping their martinis and drifting into the carnage, were long since gone to dust. He might as well have been listening to an account of the Third Crusade. Yet . . .

Warfare had been a common enough occurrence over the centuries, but to Martin it was part of a barbaric past, relegated to dusty tomes in libraries. Unthinkable.

He gathered his courage and resumed his routine on the beach. He even walked briefly into the forest one afternoon, focusing his mind desperately on the young actress who played Sunday.

When, on September 14, Martin's time, the Wehrmacht rolled into Poland, Martin was lying on the sand, naked, tanned, reading Byron. He heard the news at dinner, listened to appeals from Britain and France, from the White House and the Vatican. After sundown, while the first battle reports came in (both sides were claiming early victories), he looked out at the dark quiet hills, trying to imagine the ponderous tanks clanking toward him, Heinkels crossing his western mountains to drop explosives on his head.

The Germans bombed Cracow. Martin listened to an eyewitness description, heavy accent, heavy static, muted blasts, children fleeing the stuttering Stukas, Nazi tanks sighted west of the city, everything afire. . . .

Emory Michael, of the Blue Network, got through from a small town whose name he couldn't get straight. The townspeople, all women and children, had gathered in a pasture on the west side, watching the Nazi planes circling Cracow, the fountains of flame springing up beneath them.

Michael found a woman who spoke English, and asked where her

husband was. "With the cavalry," she said. "They will cut the Boche to pieces!"

Horses, thought Martin. He turned it off, unlocked the door, and stepped out into the night. After a long while, he strode off along the beach, listening to the unhurried roar of the sea. From here, the war seemed so distant. (He smiled at that.)

He turned inland toward the trees. Rain clouds were building in the west.

What was remarkable: these people bombed and strafed—how many would die during this conflagration?—and it would all pass, leaving only a few ripples on the tide, the wreckage washed out to sea. . . . And his generation did not remember, knew only there'd been a war, and that so many million had died.

And Martin himself? He laughed aloud, and the sound bounced off the trees. Martin fears shadows.

He stood, facing the dark, listening to the quiet. It had not the sounds of a terrestrial forest: not the loud crickets, nor the creaking branches. A fine spray began to fall. Go or get rained on.

Martin strode into the trees, squeezing his mind shut. The forest floor was covered with leaves, and the wind scattered them before him. He ducked under a floater that had tethered itself to a low branch. Something small, with fur, stopped to watch.

He came on Patricia's grave and said hello, aloud. There was no marker, other than three rough stones. Eventually, soon, he would correct that.

He sat down. It was a beautiful leafy glade, the sort of place in which children might play, or lovers. He cradled his chin against his knees, and mourned all those, down the long years, whose lives had been cut short, caught in the wrong place at the wrong time, victims of greed, folly, or plain bad luck: Patricia, the children of Cracow, the woman whose husband was in the cavalry, the Roman farmers in the path of the Vandals. . . . Here's to you all, there's room here, on this nameless world, and welcome. . . .

Above him, something was making itself comfortable in a branch.

Amidst it all, there was good news: a woman named Myers was reunited with her mother after 43 years; Lepke turned himself over to a newsman named Winchell; and Martin discovered Fibber McGee. McGee was a comic character unlike anything he had encountered before: an engaging mixture of pomposity, naive dishonesty, and scrambling insecurity. McGee's world of goodhearted bumbler seemed untouched by the savagery in the newscasts.

Martin's first experience with fictional psychotics and madmen came with "The Shadow." It was a series which would not have been allowed in his own time. And his sheer enjoyment of it made him mildly uncomfortable. Week after week, as the invisible, slightly schizophrenic Shadow tracked down and eliminated mass murderers and insane physicians, Martin walked with him.

Despite the global disaster, or possibly because of it, there was a warmth to the programming, a good humor, a sense of purpose and community that extended beyond time and space to Martin's beachfront property. He walked the tree-lined streets of Philadelphia, dined in some of Chicago's better restaurants. He became addicted to "Amos 'n' Andy," followed Jack Armstrong into exotic jungle locales, explored the temple of vampires with Jack, Doc, and Reggie. He was a regular visitor in the Little Theatre off Times Square.

Meantime, Hitler's armies swept all opposition aside. President Roosevelt appeared frequently in informal broadcasts, discussing the economy and the war. Repeatedly, he assured his audience that America would stay out.

Although he could not recall the course of the struggle (he was not even certain yet which President Roosevelt he was listening to), Martin knew that, in the end, the Western Allies had won; but it was difficult, in the summer of 1940, to foresee how such an outcome might develop. Britain, bloody, desperate, stood alone. And Churchill's regal voice rang defiance across the light years.

Martin listened with sorrow to Murrow in London, as the Nazis pounded that city. A year later, he was at a football game between the Redskins and the Eagles when the Japanese attacked Pearl Harbor. He fought with the garrison on Luzon, watched the aerial battle over Midway, rode in the desert with Montgomery.

In the late spring of 1944, Datapak picked up a subspace transmission: RESCUE FORCE LEAVING HERE THIRTY DAYS. HANG ON.

By then Martin had built a portable radio, which went most places with him. He had taken to getting away from home periodically on two- and three-day jaunts into the countryside. But he liked to keep up with things.

He was lying in the grass halfway up a mountain in the early afternoon listening to torch songs from the all-night "Dawn Patrol." He'd been expecting something for a week now; and when the computers broke off the AM broadcast to recite the message text to him, he leaped to his feet and shouted into that vast wilderness, a cry that must have carried down the mountains and across the forests.

He would have human company again: eyes to look into, voices

to compete with the wind.

He hurried home (singing part of the way with Kate Smith), and celebrated by finishing off a sizable portion of the remaining liquor.

Meanwhile, Eisenhower's army gathered in Britain. Everyone knew what was coming; most of the speculation centered on timing and landing points. Martin wondered if the invasion would happen before the rescue vessel arrived. He hoped so. And he discovered that the anticipation of the last days was mixed with something else, an emotion he could not put a name to.

When at last it came, it was a sleek silver bulletshaped cruiser, sailing majestically down its magnetics. (It was the same class vessel as *Alexia*, but his ship had never looked so good.) It settled softly into the scrub, dwarfing his capsule. Hatches rotated, opened, and people spilled out. Martin hugged everybody.

They stayed two weeks, splashing in the surf, drinking at night, walking in the woods. Martin talked constantly, to anyone who would listen. He paired off with a young technician and rediscovered a few lost emotions.

Captain and crew gathered around his radio, and listened curiously to news reports and "Big Town." But the broadcasts had acquired an artifact quality: the sense of immediacy, of living through another age, had gone. When, on the fourth day of his rescue, Allied troops waded ashore on Omaha Beach, he was in a glade with his technician. And that, he thought later, was the way it should be. Nevertheless, there were still the old songs; and they alone did not recede. Rather, their suggestion of transience and loss grew more explicit.

Toward the end, the medical officer and the captain each inquired after his health. One thought he seemed depressed; the other wondered if he was actually not very happy about being rescued.

"We've come a long way," the Captain said, making a joke of it, "to have you change your mind and stay here."

Martin's eyes dimmed. The thought had occurred to him, but he had not seriously considered it. Voices need flesh.

When it was time to leave, Martin shut down Datapak, turned off the lights in his home, and locked the door. He took the portable with him.

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AZIMUTH 1,2,3...

by Damon Knight

art: Odbert

Writer's Digest Books
recently published
the author's
Creating Short Fiction, a
how-to volume which
we commend to you
most highly.

The recently published memoirs of Azimuth Backfiler provide a fascinating glimpse into the life of a little-known genius. The son of an eccentric experimental educator, Azimuth graduated from MIT

at the age of seven and obtained his first doctorate when he was nine. While still in his teens, he invented the steam-powered cross-bow, the three-hundred-and-sixty-day calendar, and the edible type-writer.

At the age of thirty, having solved the riddles of the Philosopher's Stone, the elixir of life, and the unified field theory to his own satisfaction, Backfiler turned his attention to time.

"Consider time," he told himself. "According to conventional theory, it is a dimension along which we travel at a fixed rate, and as we travel, the whole physical universe continually comes into being and ceases to exist again behind us, a wasteful and highly improbable process.

"Is it not more likely," he went on, "that the universe exists in its perfect completeness both in time and in space, and that the movement through time which we experience is merely an artifact of consciousness? But, if so, why should it be impossible to travel backward in time? Evidently our experience of duration is conditioned by an increase of entropy in the direction of travel; if, therefore, I could discover or create a local system in which there was a decrease in entropy, I would necessarily experience a movement through time in the opposite direction."

Backfiler accordingly built a large shielded chamber and filled it entirely with living organisms of various kinds—trees, shrubs, insects, worms, snails, and bacteria—for it is well known that living things do not obey the law of entropy. Entropy is defined by physicists as an increase in disorder, as, for example, in reducing an automobile to a pile of junk; every living organism, however, is an example of the contrary tendency, which might be described as a junk pile growing into an automobile.

By a clever application of unified-field mechanics, which he had worked out during an idle evening, he shielded the chamber from all outside influences whatsoever, and made up his mind to enter the chamber, wearing a self-contained suit of his own design, exactly one week from the day the chamber was completed. Therefore, he was not surprised to see himself emerge from the chamber, wearing this very suit, a moment after he had formed the decision.

The second Azimuth, having discarded the suit, handed him a copy of the *Wall Street Journal* dated one week in the future; he then sat down in Azimuth's favorite chair, crossed his legs, and lit Azimuth's favorite pipe. Azimuth 1, as we had better call him, turned at once to the financial section, noted the rise of certain stocks, and telephoned orders to his broker.

Our philosopher's purpose in this was not to increase his already

vast fortune, but to investigate certain paralogical consequences of his successful reversal of time. Leaving Azimuth 2 to his own devices, he retired to one of his several laboratories where he spent six days in drawing plans for a perpetual motion machine, an automatic novel-writer, and an engine designed to run on chicken fat.

On the seventh day he returned to the chamber carrying a copy of the *Wall Street Journal* containing a financial section which he had had especially printed for the purpose, and in which certain stocks which had actually risen were shown as having declined, whereas certain others which had really declined were shown as having risen.

Wearing his life-support suit, he entered the chamber, where he was so closely surrounded by greenery that for the next seven days it was impossible for him to do anything but meditate on the curvature of space and the origin of the Big Bang. This he accordingly did, and by the end of the week had developed and committed to memory a new theory of transcendental functions expressed by a novel system of notation. When the week was up, he emerged from the chamber and was interested to discover that there were already two Azimuths awaiting him.

One of these, whom we had better call Azimuth 3, had just taken off his suit and was handing a copy of the *Journal* to Azimuth 2. Our philosopher in turn divested himself of his heavy garment and handed a copy of the *Journal* to his counterpart, whereupon still another Azimuth emerged from the chamber. Azimuth 3, taking advantage of the confusion, had already seized the favorite chair and favorite pipe, but within a few minutes the room was crowded with so many Azimuths, all of whom hated to be jostled, that those nearest the door were forced out into the corridor, and thence to other rooms which also rapidly filled up, with the result that in half an hour Azimuths were spilling out onto the grounds and through the gate into the public road. Since, as has been said, the time chamber was shielded from all outside influences whatsoever, it was useless to contemplate destroying it, even if it had been possible for the Azimuths outside to make their way through the press of others emerging.

More than thirty Azimuths were waiting for the next airport bus, the others having correctly calculated that there would be no room for them; these latter were dispersed along the streets attempting to flag down taxicabs or hitch a ride. By various such means, approximately three thousand Azimuths had reached the Boston airport by early afternoon and had booked seats, using three thousand

identical credit cards, on the earliest flights in every direction. Other thousands packed the railway station and caused a traffic jam in the streets outside. While waiting, each Azimuth scribbled calculations, supporting his papers on the back of the Azimuth ahead. It quickly became clear to all of them that they, or rather their predecessor Azimuth 1, had made a serious blunder: by handing a doctored copy of the *Wall Street Journal* to Azimuth 2, he had created a conditional loop in which the Azimuths were part of an infinite series.

Assuming that the Azimuths were emerging at the rate of approximately one every three seconds, at the end of a day there would be 28,800, not counting the original Azimuth, and at the end of the first week there would be 201,600. The world could well support that number of universal geniuses and might even benefit from their existence; but at the end of a year, if nothing were done to halt the influx, there would be 10,512,000, causing a severe strain on food supplies, not to mention housing and laboratory facilities.

Interviewed in the Boston airport by a representative of the press, one of the Azimuths said, "The problem is a rather challenging one, because it is impossible *a priori* to intervene in the time loop, and equally impossible to reach a period before the beginning of the loop by the method I used, since the latter depends on the construction of a chamber which I did not construct before I constructed it.

"Is that clear so far? Now, it follows that the only way out of our dilemma is to discover a second method of reversing the flow of time, perhaps by the use of an artificial worm-hole. Even if this turns out to be possible, it will be difficult to create such a worm-hole on the surface of the planet without severe disruptions of the superficial layers of the crust, and therefore I conclude that this research may take as much as a year or perhaps even longer. However, as soon as the project is completed, of course—"

At this moment he vanished with a pop, and so did all the other Azimuths except the original one, who, before the beginning of his ill-fated experiment, had received a visit from still another Azimuth warning him not to attempt it. This Azimuth, whom we may refer to as Azimuth 10,512,000, then popped back into his worm-hole and returned to his own time a year in the future, with the result that none of the catastrophic consequences of Azimuth 1's blunder ever happened, and accordingly that the world never knew of it until it was revealed by the charmingly modest scientist himself in his memoirs, which we thoroughly recommend to your attention.



PEG-MAN

by Rudy Rucker

art: Odbert

Any popular phenomenon with the remotest relation to SF (and some with none) always produces a deluge of stories on or about the subject. Video games are no exception. This tale, however, is an exception to the deluge: a real story, not a one-punch vignette.

The author, back from two years of European exile, now lives with his family in southern Virginia, where he is a mathematics professor at Randolph-Macon Women's College. Dr. Rucker is publishing four books this year: the novels *Spacetime Donuts* and *Software*, a non-fiction magnum opus called *Infinity and the Mind*, and a collection of his stories: *The Fifty-Seventh Franz Kafka*. Dr. Rucker further reports that in the process of doing research for "Peg-Man," he and his son spent approximately as much as he is being paid for the story.

It was hot. Polly was driving Rhett home from work. Pretty Polly, fresh out of college, driving her husband home from his job at the arcade. Rhett had been fresh out of college three or four years earlier, but it hadn't took.

"Eat her, Polly, eat her fast," cried Rhett. A fifty-year-old woman in a pink alligator shirt and lime-green Bermudas was in the crosswalk.

"Peg-Man, Rhett?"

Rhett made change and serviced the machines at Crasher's, a pinball and video arcade in the new Killeville shopping mall. He left about a third of his pay in the machines, especially Peg-Man and Star Castle. Sometimes, when Rhett had been playing a lot, he'd come home still *in the machine's space*, the Peg-Man space today, a cookie-filled maze with floorping monsters that try to eat you while you try to eat all the cookies, and there's stop-signs to eat too: they make the monsters turn blue and then you can eat them back till they start flashing, which is almost right away on the third and fifth boards. . . .

"Yeah. I broke a hundred thousand today."

"My, that's a lot." The uneaten fifty-year-old preppie was out of the road now. Polly eased the car forward.

"Sixteen boards," added Rhett.

In Peg-Man each time you eat all the cookies and stop-signs, the screen blinks and then goes back to starting position. Almost all the video games include some similar principle. Killing off all the mon-

sters in Space Invaders, blowing up the central ship in Star Castle, making it through the maze in Berzerk: in each case one gets a reset, a new board. The rules of the game usually change somewhat with each new board, so that as one moves to higher levels, one is exploring new space, probing unknown areas of the machine's program.

"There was an incredible show after the fifteenth board," Rhett continued. "All the monsters came out and took their robes off. Underneath they were like pink slugs. And then they acted out their rôles. Like the red one is always first?"

Polly smiled over at Rhett. He was long and skinny, with a pencil-thin mustache. He knew that he was wasting his life on the video machines, and she knew, but it hadn't seemed to matter yet. They had time to burn. They were married, and they both had college degrees: till now that had been enough.

"I went for the interview, Rhett."

"Yeah? At the bank?"

"I think I can get it, but it looks kind of dinky. I'd just be a programmer."

"You don't know computers."

"I do too. I took a whole year of programming, I'll have you know."

"A useful trade," mused Rhett. "Killeville College prepares its students for a successful career in modern society. The New South. Why did I have to major in English?"

"You could get a better job if you wanted to, Rhett."

Rhett's fingers danced across phantom controls.

"Tfoo, tfoo, tfoom!"

The next day, Polly decided to take the bank job. It was dinky, but they paid five dollars an hour; and Mr. Hunt, the personnel officer, promised that there were opportunities for rapid advancement. After signing up and agreeing to be there Monday, Polly drove over to the mall to tell Rhett.

The mall was a single huge building jig-sawed into a lake of asphalt. Crasher's was in the middle, right by Spencer Gifts. It was dark and air-conditioned with a gold carpet on the floor. A row of machines was lined up along each wall, pinball on the right, video on the left. Polly like the pinballs better; at least there you were manipulating something real.

The pinballs glowed and the videos twinkled. A few youths were playing, and the machines filled the room with sound.

Intruder alert, Intruder alert.

mmmwwhhhhaaaaaaAAAAAAAAAA-KOW-KOW-KOW!

Welcome to Xenon.

Doodley-doodle-doodley-doo.

Budda-budda-zen-zen-BLOOOO!

Try me again.

There at the back was Rhett, grinning and twitching at the controls of Star Castle. He wore a news-vendor's change apron.

"I took the job," said Polly, coming up behind him.

"Just a minute," said Rhett, not looking up. "I'll give you change in a minute." He took her for a customer, or pretended to.

A fat spaceship rotated slowly at the center of the Star Castle screen. Surrounding it were concentric rings of light: force-fields. Rhett's ship darted around the perimeter of the rings like a horsefly, twisting and stinging, trying to blast its way to the machine's central ship. Eerily singing bombs pursued Rhett; and when he finally breached the innermost wall, the machine began firing huge, crackling space-mines. Rhett dodged the mines, firing and thrusting the while. One of his bullets caught the central ship, and the whole screen blacked out in a deafening explosion.

"That's five," said Rhett, glancing back. "Hi, Polly."

"I went to see Mr. Hunt like we decided, Rhett. They're really giving me the job."

"Far out. Maybe I'll quit working here. The machines are starting to get to me. This morning I saw a face on the Peg-Man screen."

"Whose face, Rhett?"

The new board was on the screen and Rhett turned back to the controls. Wi-wi-wi-wi-wi-wi went his bullets against the ee-EEeeEEeeEEeeEEee of the smart bombs and the mmmm-MMMMMwaaaaaaa of the force-fields.

"The president," said Rhett, sliding his ship off one corner of the screen and back on the other. "The president of the United States, man. He thanked me for developing the software for some new missile system. He said that all the Peg-Man machines are keyed into the Pentagon, and that the monsters stand for Russian anti-missiles. I ran twenty boards. Nobody's ever done that before."

There was a big hole in the force-fields now. The fat, evil ship at the center spat a vicious buzz-bomb. Rhett zapped it wi-wi-wi from the other side of the board. Then the ship. BLOOOOOOOOO!

"Six," said Rhett, glancing up again. "I'm really hot today. I figure if the Pentagon put out Peg-Man, maybe someone else did Star Castle."

Polly wondered if Rhett were joking. In a way it made sense. Use the machines to tap American youth's idle energy and quirky re-

flexes. A computer can follow a given program as fast as you want, but a human operator's creative randomization is impossible to simulate. Why *not* have our missiles trace out Peg-Man monster-evasion paths? Why *not* tape every run that gets past twenty boards?

"Did the president say you'd get any money?" asked Polly. "Did he offer you a job?"

"No job." Wi-wi-wi-wi-wi-wi-wi. "But he's sending a secret agent to give me a thousand dollars. If I tell anyone it's treason. Aaaaaauugh!" Crackle-ackle-ackle-FTOOOM. Rhett's ship exploded into twirling fragments.

"Change please?"

Rhett changed a five for one of the customers, then turned his full attention on Polly.

"So you're taking the job at the bank? They're really hiring you?"

"Starting Monday. Did you *really* see the president?"

"I think I did."

"Why don't you phone him up?"

"It was probably just a tape. He wouldn't know me from Adam."

Rhett fed another quarter into the Star Castle machine. "I'm gonna work on this some more. See who's behind it. Will you hand out change for me?"

"O.K."

Polly tied on Rhett's change apron, and leaned against the rear wall. Now and then someone would ask her for more quarters, always boys. White males between 14 and 34 years of age. Interacting with machines. Maybe, for men, women themselves are just very complicated video machines. . . . Polly pushed the unpleasant thought away. There was something more serious to think about: Rhett's obsession. The whole time she made change, he kept plugging away at Star Castle. Ten boards, fifteen, and finally twenty.

But no leader's face appeared, just the same dull target with its whining force-fields. A flurry of bombs raced out like a flight of swallows. Rhett let them take him, then sagged against the machine in exhaustion.

"Polly! Are you working here?" A big sloppy man shambled up. It was Dr. Horvath, Polly's old calculus professor. She'd been his favorite student. "Is this the best job a Killeville College math major can aspire to?"

"No, no." Polly was embarrassed. "I'm just helping Rhett. Rhett?" Warily her husband straightened up from the Star Castle machine. "Rhett, you remember Dr. Horvath, don't you? From the graduation?"

"Hi." Rhett gave his winning smile and shook hands. "These machines have been freaking me out."

"Can I tell him, Rhett?"

"Go ahead."

"Dr. Horvath, this morning Rhett saw the president's face on the Peg-Man screen. Rhett says the Pentagon is using the twenty-board runs to design the new anti-anti-missile system."

Horvath cocked his big head and smiled. "Sounds like paranoid schizophrenia to me, Polly. Or drug psychosis."

"Hey!" said Rhett. "I'm clean!"

"So show me *der Führer's* face. I've got time to kill or I wouldn't be here."

"Right now I'm too wrecked," confessed Rhett. "I just blew the whole afternoon trying to break through on Star Castle. But there's nothing there."

Horvath gave Polly a questioning look. He thought Rhett was crazy. She couldn't leave it at that.

"Come in tomorrow, Dr. Horvath, come in before ten. Rhett's fastest in the morning. He'll show you . . . and me, too."

"At this point Rhett's the only one who's been vouchsafed the mystical vision of our fearless leader?" Horvath's pasty, green-tinged features twisted sarcastically.

"Put up or shut up," said Rhett. "Be here at nine."

That night, Rhett and Polly had their first really big argument in ten months of marriage. Ostensibly, it was about whether Polly should be allowed to read in bed when Rhett was trying to sleep. Obviously, it was also about her reluctance to make love. But deep down, the argument was triggered by the slippage of their relative positions: Polly was moving into a good, middle-class job; but Rhett seemed to be moving down into madness.

There was a lot of tension the next morning. Crasher's didn't open to the public till ten, so Rhett and Polly had it to themselves. Rhett fed a quarter to the Peg-Man machine and got to work.

"What a way to spend Saturday," complained Polly. "That machine doesn't connect to anything, Rhett. You might as well be shouting into a hollow tree. The president isn't in there."

Rhett didn't look up . . . didn't dare to. Three boards, six.

Horvath arrived, rapping at the metal grill that covered the entrance. As usual, he was wearing shapeless baggy pants and an oversize white nylon shirt. His glasses glinted blankly in the fluorescent light. Polly let him in.

"How's he doing?" whispered Horvath eagerly.

"Ten boards," shouted Rhett. "I'm in the groove today. Ten boards and I haven't lost a man yet!"

Horvath and Polly exchanged a glance. After all the nasty, wild things Rhett had said last night, there was no question in her mind that Rhett had imagined his vision of the president. Surely Dr. Horvath knew this, too. But he looked so expectant! Why would an important professor take the trouble to come watch her crazy husband play Peg-Man at nine in the morning?

Horvath walked over to stand behind Rhett, and Polly trailed after. There is a single control on a Peg-Man machine, a sort of joystick. It controls the movements of a yellow disk on the screen: the disk moves in the direction in which you push the joystick. It's not quite a disk, really; it's a circle with one sector missing. The sector acts as a munching mouth, a hungry Chinese, a greedy Happy-Face, a peg-man. As you move it around, the peg-man eats the cookies and stop-signs in the maze. **Muncha-uncha-uncha-uncha.** Later there are also cherries, strawberries, grapes, birds, and bags of gold. **Gloooop!**

Rhett was on his fifteenth board now, and the four monsters that chased his yellow disk moved with a frightening degree of cooperation. But, **uncha-uncha-uncha**, the little peg-man slipped out of every trap, lured the monsters away from every prize. **Uncha-uncha-uncha-uncha-gloop!** Rhett ate a bag of gold worth five thousand points. That made a hundred-and-three thousand. Horvath was transfixed, and even Polly was a little impressed. She'd never seen Rhett play so well.

The next few boards took longer. The monsters had stopped speeding up with each board. Instead they were acting smarter. Rhett had to expend more and more time on evasive action. The happy little peg-man moved about in paths so complex as to seem utterly random to anyone but Rhett. Seventeen boards. Nineteen.

On the twentieth board the monsters speeded back up. Rhett nearly lost a man. But then he knuckled down and ate the whole board in one intricately filigreed sweep.

The screen grew gray and staticky. And then there he was: Mr. President himself.

"The supreme commander," said Horvath nastily. "I don't believe it."

"See?" snarled Rhett. "Now who's crazy?"

"... thank you for helping our country," the video screen was saying. The president looked friendly with his neat pompadour and his cocky, lopsided smile. Friendly, but serious. "Your photograph

and fingerprints have been forwarded to the CIA for information retrieval. An agent will contact you to make payment in the sum of one thousand dollars. This offer cannot be repeated, and must be kept secret. Let me thank you again for making this a safer world."

"That's it," said Rhett, straightening up and kicking the kinks out of his long, skinny legs.

"Are you sure?" demanded Horvath, strangely tense. "Couldn't there be a higher level?"

"The screen's blank," shrugged Rhett. "The game's over."

"Push the Start button," suggested Horvath.

"Peg-Man doesn't give free games," replied Rhett. "And I've got to open up in a few minutes."

"Just try," insisted Horvath. "Push the button."

Rhett pressed the Start button with his skinny forefinger. The familiar maze appeared on the screen. The monsters moved out of their cave and the little peg-man started eating. **Uncha-uncha-uncha-unch**. Mesmerized by the sound, Rhett grabbed the joystick, meaning to dodge a hungry red monster.

But when Rhett touched the control, something about the image changed. It thickened and grew out of the screen. This was no longer a two-dimensional video image, but a three-dimensional hologram. The peg-man was a smiling little sphere sliding around a transparent three-dimensional maze. Rhett found that he could control his man's movement in the new dimension by pushing or pulling the joystick. With rapid, automatic motions he dodged the monsters and set his man to eating cookies.

Polly was not so accepting of this change. "How did you know that would happen?" she demanded of Horvath. "What are you up to, anyway?"

"Just don't disturb Rhett," said Horvath, pushing Polly away from the machine. "This is more important than you can realize." His hands felt strange and clammy.

Just then someone started shaking the steel grate at the entrance.

"Let them in," called Rhett. "It's almost time. I don't *believe* this machine!" His face was set in a tight, happy smile. He'd eaten every cookie in his cubical maze now, and with a flourish of music it reset itself. Twenty-second board.

"Hey!" shouted the man at the grate. "Let me in there!"

He already had his wallet out. *Can't wait to spend his money*, thought Polly, but she was wrong. The man had a badge to show her.

"CIA, Miss. I'm looking for Rhett Lyndon."

"That's my husband. He's playing Peg-Man. Do you have the two thousand dollars?"

"He can only collect one. But he shouldn't have told you!" The secret agent was a fit, avid-faced man in his thirties. He reminded Polly of a whippet. She rolled back the grate; and he surged in, looking the whole room over at once.

"Who's the other guy?"

"Beat it, pig!" shouted Horvath.

Polly had always known Dr. Horvath was a radical, but this outburst really shocked her. "You can leave, Dr. Horvath. We have some private business to discuss."

Rhett glanced over with a brief, ambiguous smile. But then he had to give his full attention back to the game. The maze he was working seemed to have grown. It stuck more than a meter out of the machine now.

"I can do better than the Pentagon's lousy thousand," hissed Horvath. "I can give you anything you want, if only Rhett can help us defeat the Rull."

"Freeze," screamed the secret agent. He'd drawn a heavy pistol out of his shoulder-holster.

But rather than freezing, Horvath *flowed*. His whole body seemed to melt away, and thick gouts of green slime came surging out the bottoms of his pant-legs. The agent fired three wild shots anyway, but they only rippled the slime. And then a pseudopod of the stuff lashed out and struck the CIA man down. There was a moment's soft burbling while the alien flowed over and absorbed its prey.

And then, as suddenly as it had started, the ugly incident was over. The slime flowed back from the agent, revealing only a clean spot on the carpet, and Dr. Horvath's clothes filled back up. The head reappeared last of all, growing out of the nylon shirt's collar like a talking puffball.

"I'll admit it, Polly," it was saying. "I'm an extraterrestrial. But a good one. The Rull are the bad ones. They don't even eat what they kill. We are, of course, fantastically advanced compared to you primitive bipeds. But we need your animal shiftiness, your low cunning!"

"Rhett," screamed Polly. "Help! Horvath is an alien!" She darted past the slimy deceiver to stand near her husband, as near as she could get.

Rhett's upper body and head were inside the maze now; it had grown that much. A glowing two-meter cube of passages surrounded him. The peg-man and the monsters raced this way and that. Bob-

bing and weaving, Rhett watched and controlled the chase. The planes of the hologram bathed his features in a golden, beatific light. The peg-man completed its circuit of a randomized space-filling curve . . . and the cube flickered to reset.

"Thirty," said Rhett.

"Go!" shouted Horvath. "Go Rhett! Finish this board and we'll be able to eat all the Rull worlds without losing a single ship!"

With each uncha Polly imagined a planet disappearing into some huge group-Horvath. Rull-monsters darted this way and that, trying to foil the peg-man, but crazy Rhett was too fast and random for anyone. She wondered what to ask Horvath for. Riches, telepathy, the power of flight?

Suddenly the board was empty. Rhett had done it again! The huge maze drew back into the Peg-Man machine's screen. The image of a jubilant extraterrestrial appeared, burbling thanks. And then the screen blanked out.

"That was our leader," said Horvath. "We can't thank you enough. Anything you want is yours. Make a wish."

"PEG," said Rhett distantly. "P, E, G. P is Pentagon, E is Extraterrestrial . . . I wish I could find out what G is."

"You got it," said Horvath. "Just push the Start button. And . . . thanks again." With a slow zeenting noise the extraterrestrial disappeared, feet first.

"Was he for real?" said Rhett.

"I can't believe it," wailed Polly. "You just blew our big wish. Who cares what G stands for!"

Rhett shrugged and pushed the Start button. There was a sizzling sound, and slowly the machine, and then the room, dissolved into clear white light.

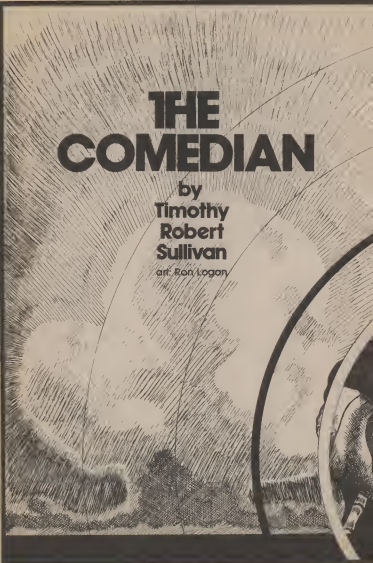
"Greetings," boomed a voice. "This is the Galaxy speaking. I wonder if you could help me out?"



THE COMEDIAN

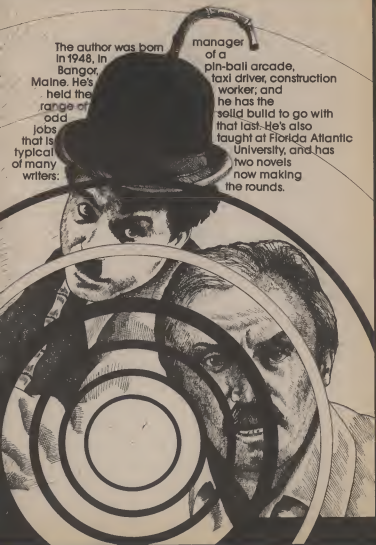
by
Timothy
Robert
Sullivan

art: Ron Logan



The author was born
in 1948, in
Bangor,
Maine. He's
held the
range of
odd
jobs
that is
typical
of many
writers:

manager
of a
pin-ball arcade,
taxi driver, construction
worker; and
he has the
sella bulld to go with
that last. He's also
taught at Florida Atlantic
University, and has
two novels
now making
the rounds.



Yogi Bear wore a wanted poster on his paunch.

"They'll never see that kid alive again," a passing woman said.

The kidnapper's heart fluttered like a hummingbird's wings. There were two pictures of a little boy named Paul Simpson on the poster, and an offer of one hundred thousand dollars to anyone with information leading to his return. But Paul Simpson's rich parents wouldn't have any better luck than those of the other five children the kidnapper had taken. He had not abducted them for money.

Glancing at the woman, he was relieved to see that she wasn't speaking to him. The giant Yogi-teddy bear standing in front of the toy store had momentarily attracted her attention, just as it had attracted his. Now she rejoined the mall's milling shoppers, Jordache jeans jiggling in a way the kidnapper knew he should have found enticing. She had probably filed Paul's disappearance with countless other urban horror stories.

The kidnapper could have told her this one was different.

He remembered abducting little Paulie . . . and other kids, too . . . they had struggled, and then became weak . . . and then. . . . He couldn't remember anything else. God, how he needed a drink.

He wiped his sweating face, bristles scratching his hand, and tried to think. His head began to ache, and saliva dribbled out of the side of his mouth. To make matters worse, his clothes were rumpled and he smelled like a goat. Better clean up his act, or he would get caught.

Shaking his head, he walked away from the toy store. Laughter and bright, multiple-color images soon distracted him. It was a display of TVs. A comedian mugged out of half a dozen screens.

Ordinary as this was, it disturbed the kidnapper. He stopped to listen to the guy's *shtik*. The timing and delivery seemed adequate, and the material was all right, but there was still something wrong. The longer he watched, the more it troubled him. It was as though he were a dog on a leash, tugging to free himself from the powerful hands that held him back. . . .

But this wasn't his master.

His head starting to ache again, he turned and walked away. Why had the comedian affected him so deeply? He couldn't come up with a reason, and the pain was so bad that he didn't want to think about it.

He passed a florist's and a clothing store, stopped in front of a video games arcade. He would try here first; parents frequently left their children in such places with a handful of quarters, going off under the illusion their kids were safe.

Such complacency angered the kidnapper. Every day, parents endangered their own children. If they gave him no opportunity to steal their children, maybe he'd be freed . . . or maybe he'd be killed so he wouldn't tell what he knew.

But what did he know?

"Diversions," he said, reading aloud the arcade's sign, "Video Games, Electronic Games, Pinball."

It was a dimly lit place, the better to show off the games' bright graphics. Whining, jangling, booming effects slashed the inside of his skull. He was in lousy shape. Just walking through the mall had tired him. He was trembling, short of breath, his knees rubbery, and he had a headache that never seemed to go away. A junk food diet and a drinking problem didn't help, but he really didn't give a damn about his health anymore. He didn't care about anything except getting the job done. If he was going to be shut up for good once it was over, well . . . at least it would be over.

If he wasn't killed, the police would catch him. Then there would be a trial, and he'd spend the rest of his days in a prison, or a madhouse . . . or be executed.

No chance of a normal life again. Christ, he couldn't even remember his own name.

He knew he shouldn't be thinking about what would happen to him. He was just asking for a headache. Besides, he had to keep moving. Otherwise, the cops would get him before he got the last two kids.

Fishing in his pocket for a quarter, he started playing a Missile Command game. He failed to save the earth, a lurid color field remaining after the holocaust.

"I won't be long, honey," he heard a woman say to her daughter as he stared at the blasted landscape. "If anyone bothers you, tell the man behind the counter." Purse swinging, she hurried out.

The little girl stood alone in the clamor of the arcade, wide eyes staring up at the adults and teenagers towering above her. She was no more than seven or eight years old, brown hair, green eyes. She wore a light blue T-shirt that said "I'm Huggable." Clutching her quarters, she bit her bottom lip and surveyed the rows of machines. Several were vacant, and she soon settled on Space Invaders. An empty wooden box helped her reach the controls.

As her quarter clinked into the coin slot, the kidnapper stole up behind her. He casually looked up and down the aisle, as though trying to decide which game to play next. No one paid any attention to him.

He felt under his windbreaker for the tranquilizer gun, turning back toward the little girl. He slowly raised his hand to clap over her mouth. But she was no longer zapping marauding aliens. She stared at his reflection in the smudged glass of the screen.

"Child molester!" she screamed, turning to glare up at him. *"Pervert!"*

The piping voice clamped onto his skull like an alligator's jaws. He slapped his hands over his temples, people turning to stare at him.

"Hey man," the counter man shouted, "you touch that kid, your ass is in jail!"

"I . . ." The kidnapper could barely speak, his throat dry and constricted. ". . . I thought she was my daughter."

"You did not!" The little girl set her jaw defiantly. "You were gonna molest me! My mommy told me to watch out for you!"

"Get outta here," the counter man said.

The kidnapper backed away. He turned and walked stiffly by the planters filled with ferns and the wooden benches, crossing to the other side of the mall. His face was hot and his head throbbed. He hoped to God the guy wouldn't call the cops.

Outside the mall's main entrance, he was grateful to be away from the noise. He was falling apart; only adrenaline kept him going now. The midday sun made his eyes water, tears flowing into the sweat that stained his clothes. He noticed a lamppost with a lettered F sign and wondered where he'd left the goddam van.

Come to think of it, he'd parked under a C sign. He spotted it and started walking toward it. As he cut between two cars, he came upon a kid playing with a yo-yo.

The kidnapper looked around. Nobody was in any of the cars near the little boy. The shimmering parking lot was still.

"Every cloud has a silver lining," he said.

"Huh?" The kid looked up at him. He snapped the yo-yo up and caught it. The kidnapper saw that it was emblazoned with Superman's insignia.

"I'm just looking for my kids," the kidnapper said. "I think they're around here someplace."

The little boy looked sad. "I haven't seen anybody."

"Well, they must be inside the van," the kidnapper said, sensing that it might not be necessary to use the tranquilizer gun just yet. "We've got a lot of stuff to play with in there."

"Really?" Squinting into the sun as he looked up, the kid looked like a little freckled monkey.

"Come take a look. They're right over here." The kidnapper started towards the C sign. Hesitating a moment, the boy ran after him.

The red van gleamed brightly in the sun. As they neared it, the kidnapper felt terrible guilt for stealing another child. But what choice did he have? He was only an instrument, a tool . . . and he had never hurt any of the children.

"Here we are, buddy," he said, unlocking the back doors of the van. "What did you say your name is?"

"Jimmy," the little boy replied. "Where are the kids?"

"Right in here, Jimmy." The kidnapper threw open the back doors of the van. "See."

Six kids sat on benches within the dark enclosure, three on either side. Between them danced a man, puffing out his cheeks and making his jaw stick out like Popeye. He was transparent in places, sparkling here and there, and zigzag lines of color distorted his shape for a second.

"*What time is it?*" the comedian asked in a funny voice.

The kidnapper drew the tranquilizer gun from under his jacket and fired a dart. Jimmy's little body stiffened, and his cry was drowned out by the comedian's raucous reply to his own question: "*It's Howdy Doody time!*"

The kidnapper clapped his hand over Jimmy's mouth, tossing the tranquilizer gun inside the van. Jimmy struggled ineffectually as he was lifted up and carried inside, too. The kidnapper hunkered over the child's body inside the dark, cramped space, holding him tightly until he weakened and became still.

None of the other children appeared to notice the abduction, nor did they notice when the kidnapper placed Jimmy on the bench beside a little black girl.

Jumping out of the van and slamming the doors shut, the kidnapper went around to the driver's side, let himself into the broiling cab, and turned the ignition key. He turned on the air conditioner while he waited for the idle to smooth out.

Just as he started to back out of the parking space, a police car pulled into the lot. He slammed on the brakes and ducked down in the seat as the cop drove behind him, praying to Christ the arcade counter man hadn't reported him. In the rearview mirror, he watched the cop pull in front of the mall and go inside. Then he slowly backed out and eased onto U. S. 1. The wheel was slippery in his sweating hands.

"Close one, dummy."

The kidnapper looked at the comedian, a fuzzy image of Bozo the

Clown now, seated on the passenger's side.

"You . . ." The kidnapper remembered now. The comedian made him take the children. It had almost come back to him in the mall . . . the giant teddy bear . . . the TV store . . . but his struggle to regain his memory had hurt his head. ". . . you . . ."

". . . are mah sunshine," the comedian sang in a nasal twang, "mah only sunshine. You make me spirit those kids a-way."

"That's not funny."

"Everybody's a critic."

"Tell me what you're doing this for."

"But you know too much already. Yeah, I think you need a refresher course in forgetting."

"No, please, I . . ."

"Say what, you crazy nut? Gonna be a good boy from here on in, or do I have to send you back to Never-Never Land?"

"If you do that, who'll drive?" The kidnapper could see the scenery rushing by through the comedian's unfocused image. "You aren't substantial."

"Of course I'm not substantial, dummy. I'm Bozo the Clown, not Edwin Newman. But don't worry, you'll still be in the driver's seat. Sort of on automatic pilot."

"Won't that be dangerous?"

The comedian chuckled like Curly of the Three Stooges, his body becoming rotund, and topped with a stubbly crew cut. "Nah, you do better that way."

"Please," the kidnapper said, starting to sob. "I'm burnt out. Don't do it to me anymore."

"Well, gee," the comedian said, turning into Jack Benny.

The kidnapper wept. "Why are you doing this? What do you want from me?"

"Oh, Rochester, where's my violin?" Benny said, resting his fingertips gently against his cheek. "I don't have any choice, either, ya know. It's no fun watching you drool all over yourself, but I've got to be careful."

Frustrated, the kidnapper swerved to avoid a speeding Datsun. Its driver honked at him as though he had been at fault.

"Well, gee," the comedian said, "it looks like the old Maxwell's got life in her yet. But, ya know, I really think you'd drive better if you didn't have anything on your mind."

Gotta keep him from putting me under, the kidnapper thought. I know I can remember everything, starting with my name. I just need a little time. But the shimmering, imperfect image of Jack

Benny was looking at him thoughtfully. "I really think you need some rest, kidnapper. Ya see, tomorrow is a big day for you."

"Somebody controls you," the kidnapper said. "Somebody controls you, just like you're controlling me. Who is it?"

"I've got a secret." The comedian straightened his bow tie, the very picture of Garry Moore. "Can you guess who's pulling my strings?"

"Couldn't be anyone on earth . . . the technology's too advanced. Aliens?"

"Mork from Ork?" Robin Williams asked with an impish grin. "Or John Q from outer space?" Where Robin Williams had been, the plump face of Jonathan Winters grimaced at the kidnapper.

"Why not? You must have intercepted our TV signals, and . . ."

"Nah," Maxwell Smart replied. "Would you believe videotapes from Sri Lanka?"

"Then you *are* manipulated by aliens."

"In a pig's eye."

"Then you must come from the future."

"What time is it, dummy?" Buffalo Bob demanded.

"Huh? No, please, I . . ."

"It's Howdy Doody time!"

Speckled light. Dark notes. Fade to black.

Drunk as a skunk, the kidnapper slowly climbed the stairs, holding on to a metal railing. He was headed toward the third floor walkup he'd rented for the week. He just needed a place to crash for the night, a place where nobody would bother him.

But what was he doing days? He'd left his regular job to work on a special mission here, hadn't he? Couldn't think about that now, though. Too tired.

Unlocking the door, he entered the tiny efficiency apartment and snapped on the air conditioner set in the room's single window.

"The Beach," he said, his voice croaking from disuse. "Miami Beach." He threw his windbreaker on the floor.

Long shadows were cast on the sand below. In the shards of late afternoon sun between them, a few working girls were still basking, taking it easy before they readied themselves to earn their nightly bread in the restaurants or hotels, or on the street. Soon the little patches of warmth they had staked out would be lost in darkness.

The kidnapper went to the tiny refrigerator in the corner and took a cold beer, downing it in two long mouthfuls. Then he stretched out fully clothed on the lumpy mattress. He didn't look forward to

sleeping, exhausted as he was. When he dreamed, he often had nightmares about children shambling like tiny "Living Dead" creatures out of a George Romero movie.

"George Romero," he muttered, wondering if the name was a key to his past. He thought about it, but nothing came to mind. He was too tired to concentrate, anyhow. He felt that he had suffered unbearable tension today, though he couldn't remember why. Now he was drained, empty as an old Coke bottle. What had he done to make himself feel so rotten?

He closed his eyes to the waning light, falling into a nightmare of children with glazed eyes marching into the bloody jaws of a hideous, laughing clown.

He awakened in the dark. He hurt all over, and his sheets were soaked in spite of the air conditioner. He shook like a newborn mouse.

Rising, he massaged his temples before getting a fresh beer. He started to snap on the little Sony TV on the shelf over the fridge, but something made him stop. TV was bad for him; he would play the radio instead.

Sweetly flowing saxophone music filled the cramped room. He went into the bathroom, shucking his clothes and stepping into the shower. The cold water woke him and soothed him at the same time. The aching wasn't so bad after a few minutes. He turned off the shower, got out, and toweled himself dry. Then he applied shaving cream to his chin and started scraping off the several days of stubble on his mustached face.

The music stopped, replaced by the sound of teletype machines. The news. As he shaved, the kidnapper grew depressed at the ominous parade of economic problems, social unrest, and the acrimonious breakdown of the summit at Oslo.

Local news was no better, a petty catalogue of drug busts, burglaries, and murders. And then something made him put down his razor before he was through shaving.

"Police believe they know who's been kidnapping children around South Florida this past week. An apparent abduction attempt at North Miami's Woodlake Mall yesterday afternoon failed, but a second child was taken in the parking lot. Joe Ciano, manager of a game room in the mall, was able to give a detailed description of the apparent kidnapper, matching the description of a missing person. Chris Reilly, an employee of the State of Florida's Endangered Species Program, left his job at Everglades National Park late last Monday afternoon without a word of explanation. Reilly drove away

in a red 1973 Dodge van, and hasn't reported in or called in since."

"Chris Reilly," the kidnapper said, staring at his reflection in the mirror. "Chris Reilly . . ."

"Reilly," the radio announcer went on in his cheerful voice, "is thirty-five years old, has dark hair, dark eyes, and a mustache. He's five feet eleven inches tall, and weighs one hundred eighty-five pounds. The suspect is armed with a tranquilizer gun that shoots darts filled with procaine, a drug used to subdue wild animals for scientific study. He is apparently tranquilizing his young victims prior to abduction. Authorities believe Reilly may be suffering a nervous breakdown due to a divorce earlier this year.

"If you see a man driving a red Dodge van, license number SHM-393, please report his whereabouts to the police.

"The Hallandale city council today voted to . . ."

Yes, it was all true . . . except for the motive. Janet had left him in February, but he had become used to living alone since then. . . . Monday, he'd been out in the canoe looking for a young alligator to tag. After drugging it, he was supposed to slip a numbered aluminum band over its snout, so the Department could follow its migrations as it grew older.

He'd never found his 'gator. Instead, this three dimensional image had flickered into existence right over the canoe in the air, chortling like the Great Gildersleeve. The image was kind of faint, but the voice was clear. Even though Gildersleeve faded in and out, the apparition had done something to Chris's mind.

Ever since then, whenever he wanted to put Chris to sleep, he just said: "*It's Howdy Doody time!*"

"The comedian," Chris said. He had made Chris look for children to abduct. Whenever Chris tried to remember why he was the kidnapper—or when he didn't work at it hard enough—his head started splitting like it had been smacked with a baseball bat. And the comedian could make him forget. . . .

How many children had he taken? First there was a little blonde girl in Flamingo. Then the little black boy, Thomas. And then Susie. Chris counted seven, altogether.

The comedian wanted eight. Four of each sex. Chris was supposed to take one more, a girl. Good God, what did the comedian have in mind for those babies down in the van?

"I gotta call the cops," he said. There were clean clothes in the closet. The comedian had let him buy them and the other things he needed after he had taken all of his money out of the bank on Monday. He slid into a fresh pair of jeans and a blue work shirt.

There was no phone in his room, so he would have to get to the pay phone in the parking lot downstairs. He was working on the bottom button of the shirt when a Diamondback crawled inside his brain and bit down hard, its venom paralyzing him.

"Going someplace, dummy?"

Don Rickles stood between him and the door. "Are you stupid, or does your mother dress you that way?"

Chris lurched toward him. The pain in his head drew a bloody film over his eyes. He almost fell, but managed to hold onto the dresser as his knees buckled.

"The children," he gasped, struggling to catch his breath.

"Hang onto your lid, kid," the comedian said, wagging his finger like Kay Kayser, "here we go again."

"No!" Chris screamed. "I won't let you take them!" He reeled toward the door again, passing through the image this time. The hairs on his arms stood up. He shoved open the door, the pain singing inside his skull like a billion crickets. Supporting himself on the railing, he scrambled down to the landing. His legs were silly putty, but he managed to stay on his feet somehow. Then he was at the second floor landing. He half crawled the rest of the way down, and then he was staggering across the parking lot. The pain had become refined, exquisite in its agony. He refused to surrender to it. His strength was his identity. He was Chris Reilly, a decent human being, and he would not give the children to the comedian.

Stay away from the van, he told himself. Stay out in the open. He doesn't like to show himself. You might make it that way.

He saw the flimsy shelter of a pay phone ahead, a glowing shrine in the early morning darkness. Then he was clutching at the receiver, reaching in his jeans for a quarter.

"No," he moaned. "Oh, God, no." No change in the pockets. Freshly laundered pants. He slumped against the metal shelf under the phone, hearing the busy signal as the receiver dropped. It struck his leg and dangled a few inches above the ground.

"All right. All right, all ready." Bespectacled and redheaded, the comedian stood on the shelf inside the little phone shelter. He leaned against the oblong box of the phone, a foot-high Woody Allen. "I'm proud of you. You're a hero. Practically a John Wayne. So stop whimpering; you're embarrassing me."

The pain subsided. Chris leaned against the booth, trembling and out of breath.

"I'm like death, taxes, and mothers-in-law," the comedian said. "You can't get away from me."

"Why?" Chris was just waiting for the comedian to ask him what time it was, wearily reciting the usual litany of questions. "Where did you come from? Who sent you?"

"Well, you guessed it before. I'm a projection from the future. I'm on a loop stretching from my time back to yours. Your brainwaves are my anchor in your time."

"A loop?" Chris struggled to understand. "What kind of loop?"

"It's kind of hard to explain, but the loop is tightening all the time. I first focused in on its outermost periphery, homing in on a pattern featuring beta waves with an interaction of alpha and theta—human, in other words. You."

"A random choice?"

"Yeah, but for what it's worth, you seem to be a bright guy."

"Thanks, but it's a wonder I can think at all after what you've put me through."

"It had to be done."

"Yeah, right. I'm standing here talking to Woody Allen, right? I'm crazy. Maybe I really did abduct a bunch of kids. Maybe I even meant to molest them . . . or even kill them."

"Kill them? With kindness, maybe. We can't pass a Burger King without you running in to pick up a snack for the little monsters. Never have I seen such a boy scout. The way you put away the beer, I didn't figure you for Jimmy Stewart in *Mr. Smith Goes to Washington*."

"The beer . . ." Chris could still taste it. "Why'd you let me drink so much?"

"At first it helped keep you in line, but after a while it just numbed out your brain—helped break down the conditioning."

"I've always had a weakness for drinking. My wife . . ."

"Look at you, ready to confess all your sins. If everyone had half your guilt, it never would have happened."

"What never would have happened?"

Archie Bunker blotted out Woody Allen. He patted his potbelly and took a drag from his cigar. "The Big One, meathead. Double-ya Double-ya Three."

"A nuclear war . . . ?"

"Oh, whoop-de-doo. You sure do catch on quick. Just like the rest of them dingbats back in your time, blowing everything to hell just to show who was the biggest jerk."

"You mean it's gonna happen?" Chris asked. "It's really gonna happen?"

"The biggest cookout in history, meathead, only the marshmal-

lows and weenies got a funny glow."

"Oh, God . . . the world . . . civilization."

"Most of it. Libraries destroyed, stored information frazzled by the blasts' pulses—we did find some old videotapes in Sri Lanka. Some egghead was studyin' comedy. But you know somethin'? We loined a lot about youse from them tapes. Too bad ya didn't use 'em to tape shut ya leaders' yaps."

"How can you joke about it?" Chris cried out, scared and enraged. "What's wrong with your head?"

"You think this one's bad," Groucho Marx said, "you shoulda seen the other one."

"What?"

"That's right. Gene damage. No relation to Gene Kelly, or Gene Autry, either. And nobody up ahead knows what to do about it. It's hard to take two aspirins and go to bed if you don't have arms and legs."

"Oh, Christ . . . the children. . . ."

"Say, you really *are* quick on the draw, Tex. We need a few kids to start a new gene pool. Who knows, maybe we can get a healthy breed of human going again if we work at it a little."

The sodium vapor lights began to wink out along Collins Avenue. Pink streaks of dawn touched the clouds over the ocean. Chris stared at the dull afterglow of the lamps, wondering if he could believe the comedian. "Why did you put me in that comatose state?" he demanded.

"Because there isn't much time," Groucho said. "Sort of like playing 'You Bet Your Life.' I had no idea you'd say the secret woid, but you did. Now I don't have the time to wrestle with you anymore. I have to trust you . . . I'm just glad you're not a used-car salesman."

"Look, Chris, haven't you noticed that I'm getting clearer all the time?"

Chris stared at the stooped figure in a tuxedo as Groucho paced across the aluminum shelf. The image was sharper than it had been yesterday in the van. Compared to its clarity in the canoe a week ago, it looked almost solid. "Yeah, I see."

"It's because we're getting closer to the disjunctive node."

"Disjunctive node?"

"Right, that's what causes the time loop. We can project across time around the node, closing in on it all the time. Our past, your future, it's really all the same. Waves and particles come and go around it anomalously, but it takes a helluva lot of power—and it's only going to be open for a few seconds."

"What happens when it opens?"

Groucho sucked on his cigar until the coal glowed red hot, demonstrating the growing brightness of his image as they drew closer to the disjunctive node. "Then matter can be pulled through into the future."

"The kids!"

"You got it." Groucho exhaled a cloud of smoke. "That's how we're gonna get 'em outta here."

Chris laughed aloud, the incongruously happy sound echoing through the still parking lot. But a germ of suspicion still infected him. "Why didn't you just tell me all this in the first place?"

W. C. Fields stared at him as though he were an insect. "There's a sucker born every minute, Christopher, my lad, but I couldn't be sure you weren't the exception." He consulted his pocket watch. "Precious little time to persuade you of the nobility inherent in my masterful plan. Considerably less time to dawdle now. My trusty timepiece indicates that there is slightly less than one hour before the aforementioned disjunctive node opens."

"An hour?"

"Fifty-six minutes, eighteen seconds, by my reckoning." Fields snapped the watch shut, dangled it by its fob, and dropped it neatly into its pocket. "I suggest we get started."

Chris started toward the van, and then stopped dead in his tracks. "How do I know you're telling the truth?"

"You don't, my inquisitive companion. You don't. You are, however, hopelessly embroiled in this imbroglio, and there are only minutes remaining. Can you afford to risk inaction?"

Chris thought it over. If the comedian was lying, there was nothing to lose by going along with him now. The police would surely catch up with him today. And if it was true . . . if the comedian had really come to save the children . . . and the entire human race in the bargain . . .

"Okay," he said. "Kids will be on their way to school soon, so maybe we—oh, shit, I don't have my keys."

"They'll be necessary only to open these formidable metal doors, my dear Christopher. We can hardly venture forth in a vehicle the authorities are searching for."

"But how do we . . . ?"

"Find the node? My inquisitive innocent, I am being drawn to the node as the loop tightens. Indeed, I cannot avoid it." He waved his cane in a northerly direction. "Just up the beach."

"Good." Chris ran up to get his keys, feeling the adrenaline surge.

When he got back downstairs, the comedian had turned into a darkly handsome young man wearing a suit twenty years out of fashion.

"Lenny Bruce!" Chris said. "You were always one of my favorites."

"Now he stops to admire my stuff," the comedian said. "I just needed something a little less conspicuous."

"What if we can't get another kid before it's time?" Chris said, unlocking the back.

"One of the girls will have to take an extra boyfriend, which might start the first war up ahead." The comedian smiled as the doors opened. "Come on out, kids. It's time to get a little exercise."

The children stirred and began to jump silently onto the asphalt, one by one. "Jackie, Thomas, Michael, Cherie, Jimmy, Susie, and . . . Paulie."

"Paulie." Chris remembered the poster on Yogi Bear's paunch, and the agonizing struggle to regain his identity. "Comedian, you play rough."

"There's a lot at stake." Lenny Bruce almost looked real now, except for an occasional ghostly line wavering around him. "Let's get going."

The children in tow, they started up Collins Avenue. A jogger passed, eyeing them curiously. The sun was a brilliant disc reflected on the water as a rippling orange bar.

"Forty-five minutes," the comedian said.

They walked faster. The sun was warm and Chris was glad he wasn't wearing his windbreaker. Then he remembered that he had worn it only to hide the dart gun. "The gun," he said, turning to go back and get it.

"Forget it, jerk-off," Bruce said. "No time."

"Right." Traffic was picking up, and Chris noticed school buses and cars with children in them. Then a police car passed by, freezing his heart. The cop looked at them, and then drove on.

"Jesus," Chris breathed. "Jesus, Mary, and Joseph."

"They don't expect to see two men," the comedian said.

"It's still a miracle he didn't stop me," Chris said. "These city cops."

"The boys in blue. Miami's finest. Mean, just like most people in your time," Bruce said. "I guess there was just no way out of blowing the whole place to hell."

"Yeah," Chris said, hearing an angry horn blow on the street. "We all sensed it was going to happen sooner or later. Nobody knew how to stop it, though."

"Assholes."

They kept walking. Chris wanted desperately to find one last little girl. Perhaps his conditioning hadn't completely worn off. "How much time is left?"

"Twenty-eight minutes." The comedian turned to the children. "How ya doin', kids?"

"Fine," Jackie said. Jackie Tiger was a Miccosuccee Indian girl. Chris had loved her dark, liquid eyes and black hair from the first. He and Janet had never had any children; that was one reason their marriage hadn't lasted. And now he was bonded to the comedian, with seven children to protect from a world gone mad.

A middle-aged couple passed them, smiling at the children. Both wore Bermuda shorts in the already considerable heat.

"Say good morning, kids," the comedian said.

"Good morning," the children all sang in unison.

"You've still got them under your thumb," Chris said. "Will they be zombies like this in the future?"

"Are you serious? Look, this is one time when the end justifies the means, believe me. But they'll be free up ahead. We've got a pretty nice place set up for them, in fact."

"Utopia?"

"No such thing." Lenny gestured around them. "But better than this toilet any day. Keep walking. We've only got fifteen more minutes."

Chris walked as quickly as the children's shorter legs would permit. He began to count the seconds. Sixty, one hundred, two hundred, three hundred.

"Ten minutes," the comedian said.

They were almost jogging now. The comedian looked just like a living, breathing, three-dimensional human being, the reincarnation of Lenny Bruce, come to see the unhappy world end.

"Look." Chris saw a group of kids waiting at a bus stop. One was off by herself a few yards, examining an ant hill. She was a little East-Asian girl.

"Perfect!" the comedian said. "Such a gene pool we'll have if you can nab her."

"Have the kids tell her they're walking to school," Chris said. "Make them ask her if she wants to go with them."

"All right, but if it doesn't work right off, you gotta grab her. Okay?"

"Okay."

"Kids," the comedian said. "See that little girl over there? I think she's really nice, don't you? Why don't you ask her if she wants to

walk to school with us? Make sure you tell her about all the fun we have."

The children giggled. Chris and the comedian passed the little girl and hesitated while the question was put to her by Paulie, the others joining in persuasively from time to time in their high voices.

Another police car drove by.

"Jesus," Chris muttered

"What's your name?" Susie asked the little girl.

"Premika."

"Are you from around here?" Jimmy asked, spinning his yo-yo.

"No, I'm from Thailand."

This seemed to confuse the children. Jackie said, "Do you want to walk to school with us or not?" as though she were growing impatient.

Premika looked at Chris and the comedian. "Who are those men?" she asked in her lilting accent.

"Nobody," Michael said. "Just two men."

Premika shook her head emphatically. She would not go.

The bus pulled up to the curb, and the children lined up as the driver opened the door. Premika was separated from the others by the comedian's seven children.

"Move!" the comedian said.

Premika was looking worriedly at the bus. Chris lunged and scooped her up, turning to run with her kicking and screaming in his arms. The other children ran behind.

"Four minutes!" the comedian shouted.

"Put me down!" Premika screamed. "Put me down!" Then she started babbling in Thai, alternately wailing and shrieking. Her sneakers drummed at Chris's thigh as he clapped a hand over her mouth.

The bus driver laid on his horn, and the children at the bus stop were shouting excitedly.

"It's just ahead," the comedian said. "You can make it, Chris."

But Chris's lungs were already aching, and his heart felt as though it had doubled in size. He kept running, though, feeling Premika's warm tears run over his fingers, mingling with his sweat. She bit his hand, but he didn't let go, even when blood started running down his wrist.

Sirens wailed somewhere behind them

"Hurry up, kids!" Lenny shouted. "It's not much farther."

Premika was whimpering now, nearly fainted. But Chris didn't lighten his grip. She could have been faking, waiting for a chance

to break free.

"This way!" The comedian led them onto a public beach.

Chris saw Haulover Pier cutting through the glittering waves ahead, his calves aching from running in the sand while carrying Premika. His breath came in strangled gasps, and his arms felt as though they would fall off. But he couldn't quit, not now.

The sirens drew closer. Rubber screeched. Car doors slammed. A man shouted through a bullhorn: "Give it up, Christopher Reilly. You can't go any farther."

As if to prove it, a security guard ran toward Chris from the far end of the pier. Chris turned to see half a dozen cops sprinting over the sand, pistols drawn.

"No," Chris said. "Not this close."

Early sunbathers watched apprehensively, catching Chris's eyes as he desperately searched for a way to keep going.

"Let the children go, Mr. Reilly. It's gonna be all right. Just let the kids go."

As though in response, the children gathered closer about Chris, Premika, and the comedian.

The policemen leveled their pistols, clutching them in both hands, legs spread.

Chris started to cry. He let the confused Premika down, and she stood in the sand with the other children, looking curiously up at her kidnapper.

"Sir," the policeman said to the comedian, "please come with us first, then you, Mr. Reilly."

The comedian stepped obediently forward, and turned into Charlie Chaplin. The policemen gaped as he twirled his cane.

Baggy pants fluttering, Chaplin turned back to the children, shoulders wiggling with silent mirth, white teeth flashing below his mustache.

"Is it too late?" Chris whispered, not wanting to believe it.

Chaplin looked at him and winked. And winked out.

The beach was silent, but for the sea breeze.

A new sun rose in the west.

Chris remembered the radio report about the failed summit at Oslo. The war had come at last.

Rippling flame surged towards the beach. Hotels, condominiums, towers crumbled like sand castles. Whirling at the shockwave's advancing rim was a scintillant point.

The children shrank around Chris. He spread his arms to hug them tight.

A policeman dropped his gun as the point came toward him, and then all the cops and bathers were crushed into the heaving sand.

Just before the shockwave reached them, Chris and the comedian's kids were sheltered within the disjunctive node, a whorl of perfect light.

And then they were gone.



SECOND SOLUTION TO PALINDROMES AND PRIMES

(from page 63)

To prove that a repunit prime must have a prime number of digits, assume that the number of digits is not prime. Call this composite number x . It will have at least two divisors, a and b , that are neither 1 nor x . The numbers represented by a and b repunits will obviously divide the original repunit number, proving it to be composite. For example: 11111111111111 is divisible by 111 and 11111. In searching for repunit primes, therefore, you need test only those with a prime number of digits.

151 and 111111151111111 are palindromic primes. Williams proved that the next largest prime of this form consists of 45 ones on each side of 5.

11411, 1114111, and the number formed by 32 units on each side of 4 are palindromic primes. Williams found that the next largest prime of this form consists of 45 ones on each side of 4.

The two mammoth primes, each with 91 digits, are called "twin palindromic primes" because they are identical except for their middle digits which differ by one. This is the largest known pair of twin palindromic primes.

Williams also found an astonishing "almost palindromic prime." It consists of 8 with 252 nines on the left side and 253 nines on the right!

THE SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

Don't forget Dr. A's personal appearance coming up next month. Make your plans now for social weekends with your favorite SF authors, editors, artists and fellow fans. For a longer, later list, an explanation of cons, and a sample of SF folksongs, send me an SASE (addressed, stamped envelope) at 9850 Fairfax Sq. #232, Fairfax VA 22031. (703) 273-6111 is the hot line. If a machine answers, leave your area code and number and I'll call back at my expense. Send an SASE when writing cons. For free listings, let me know about your con 5 months ahead. Look for me behind the Filthy Pierre badge at cons.

LepreCon. For info, write: Box 14500, Phoenix AZ 85063. Or phone: (602) 278-1827 (10 am to 10 pm only, not collect). Con will be held in: Phoenix AZ (if city omitted, same as in address) on: 14-16 May, 1982. Guests will include: artists George Barr and William Rotsler, fan Jan Howard (Wombat) Finder. This con is billed as being "art oriented." To be held at the Caravan Inn.

TexarKon. Texarkana, TX, 14-16 May. Gordon R. (Oorsai) Dickson. Artist Kelly and Polly Freas, Robert ("Mythconceptions") Asprin, Margaret Middleton. Masquerade and banquet. Held at the Holidome.

SkyCon, (704) 254-2103. Asheville NC, 15-16 May. Hal ("Mission of Gravity") Clement (Harry Stubbs).

XCon, Box 7, Milwaukee, WI 53201. 21-23 May. M. Z. (Darkover) Bradley, G. (Advent) Price. Costumes.

VCon, Box 48701, Sta. Bentall, Vancouver, BC V7X 1A6, Canada. 21-23 May. Ben ("Colony," Omni) Bova.

Torque, 1812-415 Willowdale Ave., Willowdale, Ont. M2N 5B4, Canada. Toronto, Ont., 21-23 May. Sam ("Dhalgren") Delany, R. Reynolds, D. D'Amassa. Now at Seaway Hotel. "Word-oriented" (vs. media)

DisClave, c/o Mirage, Box 28, Manchester, MD 21102. Arlington VA (near Washington DC), 28-30 May. Elizabeth A. ("Northern Girl") Lynn. Stay over for the Dead Dog on Monday (Memorial Day holiday).

ConQuest, Box 32055, Kansas City MO 64111. 28-30 May. Norman ("Bug Jack Barron") Spinrad, W. A. (Bob) ("Ice and Iron") Tucker, Pat and Lee (Shree) Killough, C. J. (Faded Sun) Cherryh, Chilson.

SwampCon, c/o BRSFL, Box 18610-A, Baton Rouge LA 70893. 29-30 May. The third annual edition here.

SF Con, 337 Harford Rd., Syracuse, NY 13208. (315) 454-3020. 18-20 Jun. J. O. Jeppson MD, I*S*A*A*C*A*S*I*M*O*V, Peg & Pat Kennedy. In the previous four years, this event was called "Conebulus."

DeepSouthCon 20, 6045 Summit Wood Dr., Kennesaw GA 30144. Atlanta GA, 11-13 Jun. Karl Edw. Wagner, artist Kelly Freas. Hearts tourney. A fifth of a century for the traditional Southern-fried con.

AmberCon, Box 947, Wichita, KS 67201. 25-27 Jun. R. (Amber) Zelazny, H. ("Ugly Chickens") Waldrop.

WesterCon, Box 11644, Phoenix, AZ 85061. (602) 249-2616. 2-5 Jul. Gordon (Dorsai) Dickson, D. ("Man Who Folded Himself") Gerrold, Fran Skene. The big Western regional con at the 1978 WorldCon site

ChiCon IV, Box A3120, Chicago IL 60690. 2-6 Sep., 1982. A. Bertram (Rim Worlds) Chandler, Kelly Freas, Lee Hoffman. The 1982 World SF Con. Join before July 15 for \$50, when rates go up again.

ConStellation, Box 1046, Baltimore, MD 21203. 1-5 Sep. 1983. John (Zanzibar) Brunner, D. Kyle, Jack (Well of Souls) Chalker. The 1983 WorldCon. Join before July for \$20 and avoid the \$10 rate hike.



art:
Odbert

THE MUNIJ DESERTERS

by Chuck Rothman

Mr. Rothman tells us that
this is his first sale.
He's been writing seriously since March of 1980.
He's originally from Southold, NY;
Illustrious ancestors include a gangster
and one of the signers ending World War II
(unfortunately, he was on the losing side).
Now living in Schenectady,
the author has been a physician's assistant,
public relations coordinator,
and information & referral specialist.

Ron Snyder couldn't take his eyes off the green lumps that slithered outside the groundcar. "What are *those*?" he asked, wondering if his eyes were lying to his brain.

"The natives," the car replied. It spoke with a slight lisp; it's hard to keep them repaired in the field.

"They look like Jell-o," Ron commented.

"'Lime gelatin' is the standard comparison. You should have read your file; it's probably in there."

Ron hated it when machines corrected him. He couldn't read the file on the way to Munij; he was always too spacesick for work when his life depended on an electronic pilot. Just the thought of their failure rate brought on hot chills and delirium. This time he'd been lucky: he landed without getting hurt, and only ten kilometers off target. He wished they'd send him someplace with a spaceport and regular service.

If he didn't know better, he might have thought Space Industries had made a mistake in making him an Investigator.

All he knew was what Mr. O'Lena had told him: report to Munij and find out why people were deserting.

Ron picked up the folder and tried to focus on the words as the car milkshaked across the planet's roadless surface. The Company had claimed it a year ago, subject to the standard "evidence of sentience" clause. Half of its twelve-member exploration colony had deserted. The manager had called for help by emergency FTL-radio.

Munij appeared to be a standard paradise-class planet—warm, sunny, breathable air, few predators, plenty of good-tasting and even digestible food. Nice, but certainly no Edon or Tahiti XII.

Ron just couldn't figure why anyone would want to desert the Company. You did what the Company said if you wanted to visit any of the planets it owned, leased, or had a trade monopoly on—in other words, if you wanted to leave Earth at all.

He gave up reading; his eyes felt out of focus. He'd talk to the manager about it. What was his name? Wilbur something-or-other.

"Here we are," the car said. A thin wisp of black smoke rose into the air from the engine.

"You're smoking," Ron said helpfully.

"I know. The pollen here corrodes my gaskets. But don't worry—I probably won't explode for an hour or so."

"Thanks," Ron said as he scooped up his things.

"Just to be safe, don't look at me. The glare can be pretty bad."

The colony was a Pioneer model, a two-storey dome painted unconvincingly to look like a rock. Ron was met inside by a brown-

and-white Saint Bernard.

"You must be Ron Snyder," it said, the voice issuing from its brandy cask. "I'm Wilbur McGann."

Ron realized he was staring. "I'm sorry," he said, embarrassed by his rudeness. "I didn't know you were . . . were . . ."

"A Transphylite," Wilbur enunciated. "Don't worry—happens all the time. There's still a lot of prejudice about species-change operations."

"I imagine so."

"I had to do it," the dog explained, perhaps a bit too defensively. "All my life I felt trapped as a human . . . but I'm sure you're not interested."

"But I am," Ron lied politely, wishing he could be a bit more assertive. "I've never met one. How does it fit?"

"Pretty good. They had to miniaturize my brain to fit in the skull, but most of my . . ."

There was an explosion outside.

"Damn," Wilbur said. "Now we're down to two."

Ron was glad for the change of subject. "Any more desertions since you radioed Mr. O'Lena for help?"

"Two. Tom Goryzyca and my wife. Tom's our mechanic, which is why the cars . . ."

"Your wife?"

"Yes. Oh, I know what you're thinking. Sure we had problems, but Kathy's been very understanding since the operation. She brushes me."

"Did she run off with Goryzyca?"

Wilbur tilted his head in puzzlement. "It couldn't be that—Kathy hates sex. Our marriage was celibate from the start. Besides, they left separately."

"Do you have any idea why everyone's leaving?"

"If I knew that, I wouldn't need you. I tracked a few of them down." He sniffed proudly for emphasis. "They wouldn't tell me anything."

Ron would have to do better. "I'd like to talk with everyone. But first—I'm starved. I haven't eaten anything in three days."

"Space sickness, huh?"

Ron nodded. "I was sick as a . . . a something. I'm not very good at comparisons."

The dog nodded. "The car told me. I'll see what I can cook up. Can you fix a microwave?"

Ron shook his head.

"Damn. I'll have to open a can of something," Wilbur said as he

led the way to the kitchen.

Ron only picked at his beef stew; watching Wilbur eating his reminded him how much it looked like dogfood. He decided to talk with the other colonists. Two of them were out working; that left Sharon Duchesne, the biologist.

"Hello?" Ron said tentatively as he walked into her room.

She was wearing green eye shadow, delicately flaked with gold, and a pleasantly musky perfume. Nothing else.

"I'm sorry," he stammered.

"Don't be embarrassed," she said, looking him over. She smiled as though she liked what she saw. "I'm a practicing Nymphomaniac. You've heard of us?"

"I'm not very religious. . . ."

"Oh, but we're not like the others. We believe you must have an active sex life to get to heaven. The more active, the better."

Ron wasn't sure he liked the way she was edging closer. "Can we discuss it later? I want to find out about the deserters."

"Business before pleasure," Sharon sighed and lolled suggestively on the silk-sheeted bed. "Go ahead."

"Why do you think it happened? Your manager seems to have no idea."

She snorted. "If Wilbur understood people, he'd still be one. Personally, I think the Company made a mistake."

"Mistake?"

"Don't look so shocked. It has happened—remember Polaris? A beacon won't make up for it, either. Anyway, I think they accidentally sent people here who would like it."

Ron knew that couldn't be it; the Company wouldn't make that sort of mistake.

She stretched herself enticingly toward him. "Now that the business is over with . . ."

Ron always was attracted to aggressive women, but this wasn't the time. He searched for a change of subject. "What about the natives? Other than the fact they look like lime gelatin."

Sharon frowned. "Who . . . ? Oh, probably one of the cars. Sounds like their type of description. They're more like green amoebas."

"Whatever. Are they sentient?"

"That's a difficult question. I'm afraid it might take several years before we can understand their minds enough to even begin to make a judgment."

"Then they are."

She smiled. "Of course they are; otherwise we'd announce it immediately. You know how the Company feels about sentients—they tend to object when we rip up their planet."

She told him what she knew about the aliens. They were exceedingly more complex than the protozoans they resembled, although they did reproduce the same way.

"How do you know?" Ron asked, trying to keep his eyes from wandering away from her face. It was a losing battle.

"I've seen them. Often, in fact. I think it's their mating season. Speaking of which . . ." she went on silkily.

"I've got to be going," Ron said hastily. "Thanks for . . ."

"Don't go yet." She slinked up to him, her perfume—probably pheromonally based—overwhelming him. "Let's make love. Ever since Nick left, I've fallen behind. I need to make up for lost time."

"I really don't . . ."

"Please. It concerns my eternal salvation."

He liked what she was doing with her hands. "Well," he said, "as long as it's for a good cause . . ."

Ron tried to invent an excuse to leave. Sharon was smoking a post-sacramental cigarette and reading aloud from the Sacred Text of Kinsey. Before he could find a place to interrupt, the door smashed open.

Wilbur trotted in. "Sorry to bother you, but . . ."

"Damn it, Wil," Sharon spat, "can't you knock first?"

"Are you kidding? It's hard enough turning the doorknob. I can't be expected to . . ."

Ron didn't want to be in the middle. "What is it?"

Wilbur suppressed his growling. "Tiscone and Howe have run off, too. We're the only ones left."

"What? When?"

"Just now. Brad was collecting mineral samples and Helene was mapping out the spaceport."

"Were they together?"

Sharon laughed. "They couldn't stand each other. They blew up a few weeks ago about the site of Company Headquarters. Helene picked a spot on top of an iron field. They used to argue all the time."

"They did?" Wilbur asked. "I didn't know that."

Ron wasn't interested. "Wilbur, could you track them down for me?"

His tail wagged. "Could I? Child's play. I'd know their scents blindfolded."

"All right. Give me a few minutes and I'll be right out."

"I'd never have thought Helene would do it," Sharon mused as Ron searched for his underwear. "She loved the Company. She just finished designing the Chairman's Summer Palace."

"You'd better stay here," Ron said, pulling on a sock. "Someone should watch the fort."

"Fine with me. Wilbur's bound to be unbearable."

"You don't like him, do you?"

"Of course not. He thinks he's better than all of us. Besides, he's always breaking in on me. Jealousy."

"Jealousy?"

"Sure. He's been neutered. You know how strict some planets are about dogs."

Ron nodded. "All right. Keep an eye on things and don't go outside. I don't want to have to search for you."

A sly smile appeared on her face. "Fine," she purred. "But try to be back before dark; I'm working on my sainthood."

Ron could see Wilbur loved showing off his talents; his tail wagged happily as he led the way.

"I'm tracking Kathy," the dog said. "I know her scent better."

"Uh huh." Ron hoped he wasn't allergic to the liquid that oozed from the plant he had just brushed against.

"Really. That's the only reason. It's not like I miss her or anything."

They found her in a shelter made from the tabletop-sized leaves of one of the larger plants. She frowned as soon as she caught sight of them. Ron noticed the chuck of an electric drill where her left hand should have been.

"Go away," she said, the bit beginning to whirl.

"Kathy," Wilbur said, "this is Ron Snyder. He's—"

"Go away. I told you to stop trying to—"

"Wilbur's not trying anything," Ron interrupted. "I just want to ask a few questions."

"Not with him here. He won't leave me alone."

"Can I help it if I'm faithful?"

It was obvious the two were gathering weaponry for a major battle. Ron took Wilbur aside and asked him to go away for a few minutes.

Wilbur grumbled as he left, his tail between his legs.

"Christ, he's so self-centered," Kathy complained when he was out of earshot. "Being bionic's no easy job, either. Why, the spare parts—"

"Please," Ron said, taking a step closer. "I want—"

The drill was up and whirling. "I know what you want," she said, venom in her voice. "You men are disgusting. I'm not helpless, you know." Her voice rose in pitch, matching the sound of her motor. "You're not going to force your attentions on me!"

It took Ron several seconds to translate the phrase. "I wasn't going to do anything like that," he assured her.

"You're not?" She sounded disappointed. "Are you sure?"

"I'm sure. I'm from the Company. I just want to find out why everyone's deserting."

"I have nothing to say to you. I'm staying here."

"There won't be any punishment."

She laughed. "I know what happened to Buzhardt on Polaris."

"This is different." Ron decided to try being reasonable. "You're not going to give up civilization to live with a bunch of green amoebas?"

"Lime gelatin," Kathy corrected. "And I won't tell you anything."

Neither carrots nor sticks could get her to speak. After asking, then pleading, then threatening, Ron gave up.

"Look," Kathy said as he turned to look for Wilbur, "if you do want to attack me, I won't object."

"You'd let me?"

"Of course not; I'll drill you full of holes. But I won't hold it against you."

Just as Ron was declining, Wilbur returned. "Please, Kathy," he said, "come back. I'll be better. I promise."

"Go away. God, I hate to see you beg."

The words did nothing to stop him. "I know it's been rough on you. I can have another operation, if you like. Maybe becoming a Saint Bernard was a bad idea. You always wanted a sheepdog. . . ."

Kathy disappeared into the foliage with Wilbur whining in hot pursuit.

It was nearly dark when Ron found his way back to the colony, guided only by the smoke of another exploding groundcar. He entered cautiously, not sure if he wanted to face Sharon. He had things on his mind other than her spiritual development.

He was getting nowhere. He thought of calling in the Company Military Police—they were tough, but they'd round everyone up.

Sharon's door was open. It was futile to try to tiptoe past; he stuck his head in, hoping to get off a quick "no" before she changed his mind.

The room was empty. Taped to the red-tinged mirror beside the bed was a note.

"Deserted," it said. "Found Heaven."

For a moment, the words would not register. He looked at the note again. "Heaven." That would only mean one thing to her, but how . . . ?

"Ron!" came the joyous voice behind him.

Even after all these years, he recognized it immediately. He still thought about Hilda Pedrick, wishing they hadn't been pulled apart by opposing careers. "What are you doing here?" was all he was able to get out before he was reduced to flabbergastation.

She was wearing her uniform, stained with perspiration, her eyes surrounded by coal-black gook, just as if she had come from the practice field. "I had to come after you," she said. "There's more to life than football. They can hunt for another quarterback; I quit the team to be with you."

She moved toward him in a cloud scented with the warm odor of exertion. He always found that sexy. Before he realized what was happening, she was kissing him with intensely erotic passion. It was heaven.

Heaven?

"You're trying to get me to desert," he mumbled around her softly-probing tongue. "You're not really Hilda."

Thankfully, she didn't stop. "Try me and see," she whispered.

Ron took up her offer.

Ron slowly moved from blissful coma to semiconsciousness. His body seemed to vibrate gently; every one of his muscles had turned to lime gelatin. He hadn't realized before that his forehead could be an erogenous zone, but when Hilda had . . .

Hilda? His eyes snapped open as his brain engaged for the first time since he saw her. She was snuggled beside him, a watchful look on her face.

"You're one of the Munijans!"

"Of course," Hilda said, turning green. "I'm glad you realized so soon; the color is the hardest part."

The pieces all fit in. "You can change your shape. And you must be able to read minds—that's how you knew about Hilda." He thought of the past hour. "That's why everyone's deserting!"

Hilda looked delighted. "Very good. I hated having to explain it all again."

"So you use sex to entice—wait a minute. What about Kathy

McGann? She's not interested in that."

"Don't be fooled. She just gets off on her own purity. She loves it when she chases us away."

"Her husband was the problem. Sex was out, but right now he's found a cute little girl to pet him."

"All right," Ron said. "The big question—"

"Why'd we do it? Simple. You have no idea how *boring* asexual reproduction is. Break in half and it's over. Big deal. You folks were thinking about sex so much we had to find out what we were missing. We love it, and now that we've found out it helps us to reproduce—"

"Oh, come on now."

"Really. We need a heat stimulus to divide. Usually we just lie in the sun. But your bodies provide more than enough heat. We're working on arranging our nerve cells to enjoy it, too. Pretty soon we hope to move on to perversions."

Ron shook his head. "It won't last. The Company . . ."

"I'm sure you can think of a way to scare them away."

As a matter of fact, Ron could. But he owed his loyalty to the Company. He had never even considered going against them before.

But it *was* rather tempting. . . .

"Look," Hilda said, "I've got to split soon. The deal's this: All the sex you want in whatever way you want it. Any one of us will be more than happy to oblige. If anyone else happens by, don't tell him anything until we get to him or the deal's off. All right?"

There are often times when a person is faced with an intolerable decision. Fortunately for Ron, this wasn't one of them.

Hoffman caught up with O'Lena in the Company cafeteria. "Sorry to hear about Munij, Don. Better luck next time."

O'Lena shrugged. "You win some, you lose some. There are plenty of other planets. I feel sorry for those poor colony people, though; that plague seemed horrible."

"Plague? I thought it was volcanoes."

"Those, too. Plus blizzards and earthquakes. If Snyder hadn't had an A-1 loyalty rating, I don't think I would've believed it. We had no choice but to reclassify it as uninhabitable."

"I *am* recommending Snyder for a posthumous bonus. Of course, since he has no family, the Company keeps it; but I think he would have liked the gesture." He got up from the table.

"Hey, wait," Hoffman said. "You didn't finish your dessert."

O'Lena looked down at his tray and shook his head. "I'll skip dessert. I never could stand lime gelatin."

IMPROBABLE BESTIARY: The Doppelgänger

In Brompton Road I chanced to see
A man who looked the same as me.
In every wrinkle, trace, and line
His face was just the same as mine.
Our clothes were of the same design;
But *how* can such things be?

The stranger looked up, and *he called me by name*,
And I waited until he came closer.
And he said: "There's a reason that we look the same;
I'll explain it, if you'd care to know, sir.
I have copied your walk, and the way that you talk;
I have stolen your form and your face, sir.
Take my hand!—I insist!—*You will cease to exist*,
You will vanish, and I'll take your place, sir . . ."

He reached for me; I turned and fled.
"Come back, young man!" the phantom said.
And as he faded from my view
I heard him say: "I'll follow you;
We'll meet again, and when we do,
Soon after, you'll be dead."

A month has gone by, but I always have known
That some place far away in the distance
Lurks a man with a face *just the same as my own*
And who covets my very existence.
And some day we will meet in some preordained street
And my nightmarish double will face me.
On that terrible day *I shall vanish away*
And the man with my shape will replace me . . .

The years have passed; I'm eighty-nine.
My life's at last in dim decline.
These ancient legs are far too sore
For me to travel anymore.
What's this? A man is at the door.
His face looks just like mine . . .

—F. Gwynplaine MacIntyre

Of the non-human forms of music, a few have proven interesting or even pleasing to human listeners. Before exposure, however, the traveler should understand the possible side-effects. These are discussed under the following headings:...

—Galactic Traveler's Handbook, 564th edition



art: Val Lakey/Artifact

200 LIGHT YEARS FROM PARADISE

by Coleman Brax



Tenesdo felt unaccountably nervous as he ascended the stairway to the palace. He had welcomed his summons by the local potentate. There was nothing in the message to suggest that the Danmrr would be anything but helpful. Yet, despite the warm weather, the goose-flesh persisted on Tenesdo's legs.

Perhaps the odd steps explained his uneasiness. The Dan who had designed the stonework had not planned for human visitors. The steps were so shallow that, with his toes pressed against the risers, Tenesdo's heels remained unsupported. Worse still, troughs had been carved across each stone tread to provide finger- and foot-holds for the Dan. Tenesdo's arches were strained and his toes were bent back painfully as his sandals sagged into the depressions on every step.

Despite the favorable gravity and oxygen mix, the climb tired him quickly. The steps were infested with thumb-size black things that broke apart into smaller black things, then scuttled out of his path. In addition to seeking safe footing, he was constantly avoiding the glossy crawlers. Adding to his anxiety were the huge wings that swooped overhead. It seemed to Tenesdo that the iridescent fliers were diving out of the sky to inspect him.

Needing a rest, he slumped forward onto his knees and grabbed at a fingerhold for support. He had climbed a long way. Below him, the city of La-deen-ki-no reflected the reddish sunlight from its thousands of crystalline surfaces. Above him towered the grey palace of the Danmrr. The entrance, he realized glumly, still lay well above him. He wiped the moisture from his brow with the coarse sleeve of his robe. Then he pushed himself up from the stone and resumed his climb.

At last, the top loomed just above his head. *A few more steps*, he thought, *and I can rest once more*. He nearly tripped over his ankles as he made the last push for the top.

"Ho, hu-human." A narrow green head rose above the courtyard as he reached the final stair. He had expected to be welcomed by Dan. What was this unfamiliar creature doing in the Danmrr's courtyard?

Tenesdo managed to retreat one step without taking his gaze from the serpentine creature that had appeared. He feared losing his balance and tumbling back into La-deen-ki-no should he attempt to retreat once more.

"You ca-cannot pass through here, hu-human." The green creature spoke the local dialect, which Tenesdo had sleep-learned on the arriving starship only three nights earlier. The creature's body, as

much of it as he could see, was of a uniform rectangular cross-section roughly the thickness of his forearm. "You mu-must turn back," it said.

Tenesdo felt in his woven waistbag for the small parchment he had been given by regal courier. "I have business with the Danmrr," he said thickly. Though there was no breeze, the document fluttered as he held it by his fingertips and extended it toward the creature's eyes.

The rhombic head swung closer while the body began to arrange itself into a sinusoidal pattern at the edge of the courtyard. The black eyes scanned the parchment.

"Yours is a su-summons of low priority," it said. "The Da-Danmrr will not mind if first I have some sport with you."

The human blindly stuffed the parchment back into his waistbag. He looked past the creature in hope of finding assistance, but saw only statues of the Danmrr. There stood about the courtyard at least a dozen stone busts of various sizes; on each the prominent feature was the compound eye that crowned the tapered skull.

"You have no choice, hu-human," the creature said. "There is only one palace entrance, and I am its kee-keeper." The creature's mouth opened to display a silvery pair of pointed fangs. Still more of its body kept arriving and winding itself into the sinusoidal pattern.

Tenesdo glanced behind him and managed to retreat two more tiny steps. He was weary from the climb, and yet he urgently needed to complete his journey. "The Danmrr will not permit you to harm me," he protested in a wavering voice.

"Li-listen to a tune, human. If you can tell me its world of or-origin, then I will let you pass." The last part of its body emerged from behind one of the statues. The tail was looped around an ancient stringed instrument that it dragged across the stone floor of the courtyard. "This is a *co-columis*," it said, "an in-instrument nearly forgotten by the people who cre-created it." The box was shaped like an hourglass, with four circular openings and a thin neck. Eight strings ran along its length.

Tenesdo looked again in all directions in hope of finding aid. Above the courtyard, the stone walls of the fortress were breached by occasional oval windows, but none of the regal retinue showed themselves. Niches in the walls supported a flock of perching creatures that spread out enormous wings against the sunlit surfaces. These, he realized, were the ones who had watched his ascent of the steps. Or had they merely been flying home to their roosts? The fliers seemed oblivious to his predicament.

He glanced down at glistening La-deen-ki-no, a city where he was little more than a beggar. To remain there was impossible. If he were to raise the cost of his next starship passage, he would do so only with the aid of the Danmrr. And to reach that regal being . . . "What is it you wish me to tell you?" he said resignedly.

"The name of the world that gave this com-composition birth. Nothing more."

The creature's head turned to the instrument, snaked its way through several handles, and then stationed itself at the far end of the neck. A thin, pink tongue stuck out to depress a string. Then, to Tenesdo's surprise, another tongue and still another emerged from the creature's mouth. At the same time, its tail arrived at the instrument and reached toward the midpoints of the strings. The tapered end of the tail began to strum while the tongues flicked over the frets on the instrument's neck.

The first chords were dark and complex, and played in a progression that made Tenesdo feel glum. The tune spoke of foggy beaches dominated by high rocks, of a black sea that beat against a durable shore, of forests that passed no light. As the melody continued, Tenesdo's feeling of melancholy became acute.

He had been planet-hopping since the age of six. He had acquired, if nothing else, a store of knowledge concerning the intelligent beings in his sector of the galaxy. The music spoke clearly of its world. The sturdy bipeds who had long ago composed the work were known to him, but the words caught on his tongue.

The bleak song continued. It told of eons of darkness, of beings struggling with a niggardly planet. Tenesdo could feel that planet's mists closing around him, taking his light and air. Suddenly he found his voice. "Only the Dona-Poneel could have made such music," he shouted. "That is a tune from Poneel—from the second world about Husdon's star."

The creature stopped playing, but the mournful feeling did not leave Tenesdo. It hung about him like a rain-soaked robe as he awaited the creature's response.

"You may pass," the serpent said.

At Tenesdo's approach, four regal courtiers rose on their hind legs, grabbed with thin-fingered paws the low angular handles, and pushed aside the carved wooden door that was the entrance to the Danmrr's reception room. The courtiers wore sashes about their furred bodies—a single blue band crossed by a red diagonal. When the door slid aside, the courtiers placed their knuckles to the floor

and arched their necks in watchfulness. Below the compound eye, each Dan's skull widened to a jaw filled with broad teeth. Tenesdo, ever conscious of the nearness of those jaws, walked carefully between the courtiers and into the room.

He was not prepared for its enormity. At the far end stood a raised platform, but the distance was so great that the being who reposed there seemed little more than a patch of shimmering orange. He squinted, but could discern no shape to the orange-clad form.

Between Tenesdo and the platform lay an expanse of black-and-white mosaic. On the near-empty floor half a dozen courtiers stood in a widely-spaced line that led to the Danmrr. Two courtiers stood upright directly in front of Tenesdo. The facets of their eyes chilled his bones as he stared at them.

"Your summons, human . . ." said one, extending a grey paw.

He reached again into his waistbag and extracted the dry parchment.

"One does not speak directly to the Danmrr," the other grumbled in the low-pitched manner of the Dan. "Our Noble One has already conveyed his purpose to us." It reached for Tenesdo's parchment nonetheless and spent some moments considering it. "There is a serpent that guards our gate," it said at last. "It is a machine-serpent, built eons ago as a present to Danmrr Ka-do-min-ko-lo."

"I have encountered that creature," Tenesdo said cautiously.

The courtier turned its head slightly. Its compound eye caught a gleam from one of the oval skylights that provided most of the hall's illumination. "The serpent was created long ago by the bipeds of Poneel. It has become, in its old age, a bothersome creature. Its speech mechanism is defective . . . and its habits are unpleasant. The Danmrr would be pleased for you to rid us of the thing."

Tenesdo's stomach lurched. He had come with hopes for a quick continuation of his journey. Humans were rare in this part of the galaxy. In exchange for some minimal service, such as relating tales from his travels, he had often been presented with the cost of a twelve-light-year jump. But here was a being who expected him to earn his passage.

"What say you, human?"

Tenesdo thought of the amulet about his neck . . . of the beckoning message it carried. He looked anxiously in the direction of the distant ruler. Twelve light-years' passage was not enough for this service. He was tired of hopping and skipping like a flat stone against a pond's surface. "Paradise Seventy-four," he said softly. "In payment, I ask starship passage to my final destination." He named the

place in Commspeech. "Two hundred light-years passage," he added in case the being failed to comprehend his request.

The courtier turned and began to hop on its hind legs toward the Danmrr. Tenesdo had not previously seen a Dan propel itself in such an unsuitable manner, but he hid his amusement. The courtier approached another; there was a brief exchange of words and an uncurling of corkscrew tails. Then the second courtier continued the journey toward the ruler.

It took some time for the message to be relayed along the length of the hall and for the answer to be returned. Tenesdo wished that they would offer him a chair, though he knew the Dan used no chairs. He also wished for a drink, but he saw no wall trough anywhere in the vast hall. The courtiers, seemingly immune to thirst or fatigue, maintained their silent watch over him. At last the reply came: "Two hundred light-years *luxury* passage if you rid us of that serpent."

Concealing his joy, Tenesdo blurted out: "I must have funds . . . for expenses . . ." Before he could finish, the first courtier was hopping toward the second. He cursed himself for not naming a figure. The message-passing took even longer this time, and Tenesdo began to feel faint. That day he had eaten only a handful of starchy fruit that he'd plucked before dawn in an orchard near the outskirts of the city. His last real meal had been three local days earlier—the final meal served on the starship that had brought him to the Dan.

"Human . . ." A small cloth sack was offered to him by the courtier. A quick glance inside showed that it was filled with grey tetrahedral crystals. He patted his grumbling stomach. Though he was far from being affluent, he would eat hot food that evening. With a clumsily executed drop of his arm he indicated his gratitude; then he turned to retrace his steps back to La-deen-ki-no.

"Ho, hu-human!" The serpent was waiting for him as he crossed the courtyard. The *columis* remained in the position he had last seen it—ready to be played. "You may li-listen to the end of my piece."

Tenesdo attempted to dodge the slithering coils and reach the steps, but sections of the body rose up to block his exit. "Have you no interests other than this music?" Tenesdo complained.

"Li-listen!" The creature began to play. The great black waves crashed against the rocks. The sky was obscured by mist. As the mood of the piece overtook him, the feeling of optimism that the pouch of crystals had given Tenesdo vanished.

"Do you care for nothing but the music of the Dona-Poneel?" he shouted. He tried to plug his ears, but the notes penetrated past his

thumbs. There was no relief from the sounds. Below him spread a crystal city, but he thought only of Poneel's underground dwellings.

"There is no mu-music but that of the Dona-Poneel," said the serpent. It ended its song with a melancholy run of notes.

Tenesdo leaped over the lowered coils, waved his arms frantically to keep his balance on the shallow steps. As quickly as he dared, he began the descent toward La-deen-ki-no.

"It is true," the elderly Dan said, its shriveled tail barely making the obligatory uncurling of courtesy, "that we teach all forms of music here." The words seemed to grate against the being's ragged teeth. "But the *columis* is familiar to none but myself. And I am well into my years." The Dan lowered its rump into an oval depression in the floor.

"I must learn." Tenesdo glanced away from the Dan to the display of instruments that hung above the drinking troughs on the crystalline walls of the room. "I must play the music of Dona-Poneel. Otherwise I will suffer an eternal bellyache." He rubbed his stomach, where the meal of the previous evening lay partly undigested. Even the *cooked* food of this world did not suit him.

"The fee will not be small . . . and I must warn you also that the music may not let go of you even when you wish to let go of it."

Tenesdo ignored the comment, pulled the Danmrr's gift from his waistbag. He took out a handful of crystals and displayed them to the tutor. The being opened its jaws a crack while it brought its eye closer to the stones.

"That is sufficient," said the Dan, as it plucked the stones one by one and dropped them into a pouch strapped about its middle. "I am Hera-ko. You must understand that real practice is an essential part of your training. Sleep-learning will give you knowledge but will never make you into a performer. So we begin at once."

The tutor called for a young assistant, who scurried off to find an instrument. "Let me see your hands, human," the old one said while they waited. It reached out a grey six-fingered paw and drew the hand close to its face.

Tenesdo was not comfortable with his digits in such proximity to the Dan's jaws. He opened his fist cautiously in front of the being's eye.

"Your fingers are fat, human. You will have difficulties."

Tenesdo withdrew the hand quickly, concealed it within the folds of his robe:

"Perhaps you should reduce your intake of food."

"I've seen a machine-serpent play the *columis*," Tenesdo answered uneasily. "I believe that its tongues were no slimmer than my fingers."

The Dan swished its jaws from side to side. "The music will trouble you . . . I give you warning. But the fee is paid, so I will teach."

The assistant, moving quickly in the usual knuckle-walking fashion of the Dan, arrived with an instrument strapped to its back. The dark wood, nearly black in color, glowed under the diffuse illumination from the crystal walls. The aged one rose, undid the catch with one twitch of its fingers, then grasped the instrument. "You must find your own manner of holding this," it said. "Perhaps you will squeeze it between your knees."

While the assistant went to obtain a second *columis*, Tenesdo lowered himself stiffly to the floor. His rump was too large for the depressions the Dan sat in; he seated himself on the hard flat stone. At once, he realized that the instrument was larger than he had anticipated. He could not hold it between his knees while fingering the fretboard and strumming the strings.

"You are poorly shaped for the task, human."

He straightened his legs and tried to lay the instrument across his lap. The central part of the strings he put within comfortable reach of his right hand. The end of the fretboard then extended nearly as far as his left hand could reach.

"Your arm will tire . . ."

He tried to shift so that his left arm was less strained, but this forced his right arm to an awkward angle. Back and forth he shifted the instrument until finally he settled on a compromise position with both arms equally uncomfortable.

"Perhaps that will serve," said the Dan with a twitch of his head that suggested disapproval. "Now we begin the fingering. You must be careful to depress only the strings I call for. The others act as drones and must resonate freely."

Tenesdo found indeed that his fingers were fat by standards of the Dona-Poneel. While attempting the Scale of Midnight, he frequently stifled the deep-voiced "thunder" string. He tried angling his fingers, but unwanted contacts continued to muffle some strings. Hera-ko forced him to practice the Scale again and again until the dark resonances sounded throughout the descent. He lost track of the hours, forgot even the cries of his stomach. All that mattered was the fingering of the frets and the notes of the gloomy scales. By the time he finished his lesson, evening had arrived.

"Tomorrow you will begin the *Tunnel-borer's Lament*," Hera-ko

told him as Tenesdo rose on his numb legs. He staggered toward the crystalline door in a walk less graceful than the clumsiest two-legged ambulations of a Dan.

"You must make yourself merry after such a lesson," the tutor called after him.

Tenesdo walked stiffly out onto the stone walkway that stretched between the buildings. Merry? The dark tones reverberated in his mind. Hera-ko had been right about the difficulty of ridding oneself of the music. But his last words had been good advice. Perhaps the local fermented drinks would provide the effect he needed.

Gas-burning lamps lit his way as night arrived. The pale illumination did not hinder the view of the famed red moons. One, low above the buildings, showed a fine crescent; the other, overhead, was in gibbous phase. Scurrying Dan passed him in both directions, but paid little attention to him or to the heavens. He had detoured five light-years for a sight that the inhabitants casually ignored. Most of the natives seemed in a hurry. Was it possible that they were in search of the same relaxation that Tenesdo had in mind?

He noticed several Dan entering an open doorway from which came a noisy rumble of conversation. A bluish glow from the interior spilled out onto the walkway. Tenesdo ventured inside and found many Dan sitting on a dimly lit floor. Some of the patrons sucked at flexible tubes that were suspended from the ceiling. The others, spaced uniformly by their sitting holes, turned toward each other and grumbled loudly.

An attendant, garbed in a coarsely woven imitation of the royal courtiers' band, held out an open paw. Tenesdo dropped crystals into the paw until the attendant stepped out of his way and permitted him to enter the establishment.

The human sat down behind two Dan who seemed to have left off sipping. He reached for a tube that hung behind one of his neighbors and brought the end to his lips. This device struck him as an improvement over drinking troughs; he took a trial taste. Bitter. Bitter, but not unpalatable. He swallowed more and felt a mild warmth creeping up from his stomach. "May the aftereffects be not too unpleasant," he said in a brief prayer to his guardian spirit.

In the center of the room, a rectangular platform sat. The empty platform became the center of attention as a pair of Dan climbed onto it. The pair was oddly dressed. One wore three green bands about its torso. The other sported a green braid about its neck and spheres attached to its limbs. The spheres rattled as the being moved. The room became silent except for the hisses of the rattles

and a soft noise that Tenesdo recognized as the grinding of the jaws of the audience.

The performing beings began to scratch each other with their paws. The audience's noise grew louder. The human suspected that he was witnessing an erotic performance of some sort, but found it surprisingly unstimulating. He sucked again at his tube.

Despite the warmth, he still felt the nagging glumness he had carried with him from the music lesson. There was almost a pleasure in that sadness. He found himself wishing he had the instrument with him so that he might practice the music again. The notion startled him. There was but one reason he was enduring this unpleasant education, he told himself. "La-deen-ki-no will be a memory soon," he whispered to the amulet hung about his neck. His numbed fingers barely felt the coarse cloth as he reached inside his robe to finger the token of his guardian spirit.

You are two hundred light-years from Paradise Seventy-four, the flat oval answered in deliciously feminine Commspeech.

Tenesdo sighed. "I know."

He had been seated on the floor for half a day. His legs and back ached. His brain felt laden with the sounds of the *Tunnel-borer's Lament*.

"Human, it is not enough to play the notes in the correct sequence. What you lack is style, and that is a matter that one cannot teach." The old Dan bobbed its head; the facets of its eye reflected reddish diffused sunlight from the walls.

Tenesdo longed to scratch beneath his arm but did not dare perform so unsavory an act while the tutor watched him. "I have tried your exercises, Hera-ko."

"Then try them again." The Dan opened its jaws and began to probe its teeth with the tentacular appendage to its tongue.

Tenesdo tried to fight his itch. The exercises! He brought his mind to the planet Poneel, to the dark tunnels that lay beneath its surface. "Imagine yourself to be a tunnel borer," the tutor had told him. "Imagine the dampness of the ground, the cold clay that passes your digging claws as you continue your endless search for food."

He had done the exercises several times without success. Now Tenesdo placed himself again, in his mind, in the thin ribbed body of the sentient borer that Hera-ko had described to him.

He was alone, as he had been for most of his life. Long before, his mate's tunnel had veered off in an unknown direction and might never again cross his own. And he was hungry . . . his three stom-

achs had shriveled into tight lumps.

So he continued, clawing his way through the coarse undersoil in hope of finding another cluster of *alyp* roots. If not roots, then at least he might cross a fresh tunnel, might follow it to reach another of his kind so as not to be alone at his final moments.

The notes came clearer, more poignant, as Tenesdo fell into his reverie. The playing was almost automatic now, but the subtler shadings were under his control. Each note seemed to issue from the heart of the dark planet. "Better," said Hera-ko. "You are learning."

Tenesdo tried to smile but could not.

The government of Paradise Seventy-four invites all human males between ten and one hundred fifty standard years of age to become citizens of our planet. The climate on the occupied island groups is temperate year 'round. Food is free for the picking. Clothing is unnecessary and our filtered sunlight tans without burning. Our only social problem is the overabundance of females. We are currently at a ratio of 2.3 to 1 in the age range . . .

Tenesdo drifted off to sleep with the sweet voice of the amulet at his ear.

The green head rose above the courtyard as Tenesdo approached. The climber's goosebumps seemed to develop goosebumps of their own as the serpent showed its pair of fangs. All thoughts of his pinched toes vanished.

"Ho, hu-human. You have come for more sport. I will get my instrument."

Tenesdo managed to answer hoarsely: "Yes!" He forced himself to reach the top step, and there he waited for the creature to drag forth the *columis*. Sunlight produced an unpleasant sheen on its coils as its tail slithered into sight.

"Hu-human . . . what is that you have strapped to your back?"

Tenesdo thought that his tongue had become glued to his teeth.

"Is that a *co-columis*, human?"

"I have come," Tenesdo said. "I have come to j-join you in a duet."

A squeal rose from the serpent's mouth. Tenesdo had never heard such a sound from being or machine. Was this machine-serpent laughter? He looked longingly back down into La-deen-ki-no. "I have come to pu-play a duet," he said. "*The Tunnel-Borer's Lament.*"

The serpent squealed once again, then swung its head menacingly toward Tenesdo. The human stood his ground despite the onset of a stomach cramp. "You cannot play such mu-music," the serpent

insisted, "but if you wi-wish to hear it, I will play it for you."

"A duet!" Tenesdo croaked as he fumbled with his instrument's strap. The creature was already reaching head and tail toward its own *columis*.

"Listen, human," the serpent said. As it began to play, Tenesdo took the final step up to the courtyard and then permitted his weary legs to drop his bulk to the floor. He twisted himself into the position he had used during his lessons with Hera-ko.

I cannot get myself in tune with this creature, he thought unhappily as the other's music surrounded him. For six days he had practiced playing the counterpoint to this piece while his tutor played the primary line. Six days of practice stacked up against how many Dan-generations of years? And the instruments not even in tune! Nonetheless he began to finger the strings.

At first the effect of his own music seemed minimal. The song was dominated by the serpent; Tenesdo's notes were weak and ineffective. *There is style*, he thought, with new appreciation for the serpent's abilities. *The creature will scorn my playing*.

The music continued. Tenesdo struggled with Hera-ko's exercise. The stomach cramp eased as the soil of Poneel pressed around his body; the dank atmosphere of the planet started to work on his spirit. As he continued, his notes began to complement those of the serpent. He felt control flowing to his own hands as he took a full role in the duet.

Now the music showed the richness he had achieved in his last lesson. The duets he had played with his tutor had left him with a new insight into the nature of the Dona-Poneel's music. Though the planet was harsh, there was joy in a life that could surmount that harshness. Tenesdo felt the triumph of the Tunnel-borer as well as its sorrow as the piece resonated to its conclusion.

"You surprise me, hu-human." The serpent raised its head and stared at Tenesdo. "You show some promise with the instrument. I must seriously consider taking you as a pupil."

"Pu-pupil?" Tenesdo glanced first at the heavy instrument on his lap and then up at the creature's black eyes. This was not the direction in which he had wanted the conversation to turn.

"Yes. You have mu-much to learn. It would please me to pa-pass on some of my in-insights."

"But . . ." Tenesdo had imagined this dialog any number of times as he lay on his sleepmat hoping for his digestive tract to cease tormenting him. Yet the serpent was not following any of Tenesdo's scripts.

"Let me show you a new piece, human."

"No . . ." Tenesdo's mind was still echoing with the reverberations of the duet. He did not wish to allow another piece of Poneel's music into his brain. And what of his plan to remove the serpent from the Danmrr's palace?

The serpent began to play . . . a slow, deep melody.

"Serpent, you must think," Tenesdo shouted, ideas forming hazily. "I may be your pupil . . . I may learn your art. But what good is it without an audience? There are none here who care for this music."

The serpent lifted its head from the strings, granting Tenesdo momentary relief. "It is un-unfortunate that we find ourselves amongst such insensitive beings."

"Those are my thoughts precisely."

"But what are we to do, hu-human? I have waited for many generations for a single one such as yourself."

"You root yourself to this courtyard. That is your problem." Tenesdo slid his hand along the neck of the instrument. "I am told that the beings of Poneel have nearly forgotten the *columis*. Were we to return to the planet of your origin, our music would be most welcome."

The serpent's head began to sway from side to side. "I do find your plan appealing, hu-human. But my duties are here. I have served sev-seventeen Danmrr and will serve many times that number."

"But think of your audience . . ."

"Impossible. The Danmrr mu-must be protected."

"You are a troublesome machine!" Tenesdo put the instrument aside and rose to his feet. He rubbed at the hollow place where his stomach once had resided. There was no arguing with the creature. He had practiced the music in vain; now he must go back to the city and think of a new plan. "I will not stay with you, serpent," he said petulently. "I will go to Poneel alone. And show them how to play this music . . ."

The creature let out another of its shrill sirens, but the noise quickly died. "With your wobbling tempo and your fat fingers? They will hoot at you and pelt you with dratch-moss!"

"That is what *you* say, serpent." Suddenly he saw an advantage in the creature's reaction. He elaborated on his fable. "I will make a grand tour of Poneel. With no standard of comparison, I'll be judged greatest *columis* player of all time." Quickly he strapped the instrument to his back; then he turned slowly, ever so slowly, and took his first step back down toward La-deen-ki-no. "Every voice on the planet will hail my virtuosity." He took another step.

"Do not be so hasty," said the serpent.

"I must prepare my baggage," Tenesdo shouted gleefully. The shallow stairs no longer seemed awkward for his feet. With a new agility, he began to descend in earnest.

Behind him the serpent's voice rose in pitch. "Perhaps the Danmrr will grant me a leave from his service."

Two days later, Tenesdo was back on a starship. It was a small ship, certainly, but it was taking him toward his final destination. As he stepped into the oxygen-breathers' Luxlounge, he reflected on his good fortune. Thanks to the Danmrr's gratitude, he was a fully-paid Lux-class passenger. After the first hop in this minor vessel, he would continue his voyage to Paradise Seventy-four in a Rank I Pleasure Cruiser . . . while the serpent, locked inside a freight capsule, was routed through depots and transfer nodes to Poneel.

"Welcome, human." A thin being addressed Tenesdo in high-pitched Commspeech as he entered the lounge. "You are in time for a meal," it said. "I would be pleased to share dinner conversation with one of your species."

Tenesdo looked down at the slick skin of the creature. Its head barely reached his waist. Tentacles and eyestalks sprouted like tree branches from all sides of its torso. "It has been some time," Tenesdo admitted, "since I have used Commspeech."

But conversation was not his first concern. Eagerly, he approached the large serving wall at the side of the lounge. He quickly found the universal sign for "human." "Ahhh," he exclaimed as he passed his plate into a slot marked by the oval-on-sticks. He removed it a moment later; it was laden with thick slices of red-brown meat. Tenesdo inhaled the rich aroma. "This is what I have been thinking of for days. Now you may enjoy my company."

The slick-skinned creature collected a mass of yellow tubers, then followed Tenesdo to a table. The chairs and the heights of sections of the table adjusted to appropriate anatomical dimensions; the pair busied themselves with the food. Tenesdo could not recall when, or indeed whether, he had eaten such tender wildebeest or such succulent bamboo shoots.

"Is the meal to your satisfaction?" the tentacled one inquired from its speaking orifice while its two small mouths were crunching the tubers.

"I have not tasted better," Tenesdo replied. After his disquieting experiences with the large-jawed Dan, he found the presence of this being refreshing. And to converse in Commspeech again after weeks

of nothing but Dan grumbles was a welcome diversion. Yet, to his dismay, he was not enjoying the meal. His thoughts kept returning to the serpent.

"I have known humans who were far more cheerful than yourself," ventured the tentacled one. "Perhaps you are unaware of the entertainment program that we are about to experience."

"Have you heard the music of the *columis*, the tunes of Dona-Poneel?" Tenesdo heard the *Tunnel-borer's Lament* droning through his brain. He longed to stretch his arms out to the huge instrument. No, he told himself, *pay attention to what this being has to say.*

"I have not heard such music, human. But when they bring in the sensory transducers later, you will experience for yourself the mating habits of the Klorp. The fidelity of the recordings is said to be remarkable. After that, you will show me your widened mouth and I will know that you are no longer gloomy."

Tenesdo rubbed his nose. *The Klorp.* Yes, he had heard about them. Of all known creatures, their mating ecstasy was thought to be the most supreme. He had long hoped to experience their rites by transduction; now he found himself taking no interest in such pleasures. What had happened to him? Leaving his food half-eaten, he stepped from the lounge. In a passageway, he found a comterminal embedded in the wall.

"You wish to change your itinerary? There are transfer fees." The 'terminal's voice was gravelly, unfriendly.

Tenesdo paused. He need only turn away from the 'terminal and his voyage would continue as scheduled; that would be the course he had planned. But he couldn't keep his thoughts from Poneel. There were beings there who would applaud his performance on the *columis*. Never before had the making of music appealed to him; now, he could think of little else. With the serpent as tutor and traveling companion, he would progress rapidly in his art. Ultimately, they might even bring the lost music to the human planets.

"I am waiting for input," said the 'terminal.

"Route me to Poneel," said Tenesdo firmly.

"There are transfer fees," said the 'terminal. "Your credit balance for the unused portion of your itinerary . . ." Numerals lit up on the screen. "Less adjustments . . ." More numerals. "Fees . . . Taxes . . . insurance . . . connection charges . . ."

Tenesdo watched his balance dwindle. He had no funds to add to the remaining sum. Poneel was considerably closer to his present location than was Paradise Seventy-four, and yet the route there was turning out to be tortuous.

You will disembark at the next node, and continue on Freighter DL88W . . . "As passenger Fifth Class."

"Fifth? Some mistake . . . ?"

"Your remaining itinerary will be at Fifth Class or lower."

"What can be lower?"

The 'terminal went dead. Tenesdo knew that it was pointless to argue. He would travel by Fifth Class to Poneel as the 'terminal had decreed. The luxury trip would end at the next node.

He stood for a few moments in the passageway and contemplated what he had done. Hera-ko's warnings had been right after all. Though he had tried to put it aside, the music would not leave him. "Serpent, you have found a pupil!" he shouted in what he imagined to be the direction of the cargo bay. He doubted the creature could hear him. When they reached Poneel and the freight capsule was opened, the serpent would not realize that Tenesdo had planned a different outcome. Now, in fact, he found himself looking forward to his reunion with the sinuous creature.

Suddenly he remembered the amulet. He reached inside his robe. . . . "You are one hundred ninety light-years from Paradise Seventy-four," it told him as he unfastened the catch on the neck-chain. He held the flat white oval in the palm of his hand and scrutinized the tiny holes on its front in their pattern of a twisted loop. For some years this contrivance had been his guide and comforter. To give it up would take considerable strength of will.

Tenesdo stepped back into the lounge. His dinner companion pointed an eyestalk in his direction. "You have returned, friend," it said. "Do sit down."

"I would ask a favor of you, traveler." He held out the amulet for the eyestalk's examination.

"If it is within my humble power . . ."

"Please pass this gift to the next human you meet. But check first that it is a male between ten and one hundred fifty standards."

"Without fail," said the being. It looped the chain around a tentacle and quickly deposited the amulet in one of its body pouches. Tenesdo felt a shiver of regret as the oval vanished. "And now, friend, please finish your meal," the tuber-eater said. "We await the entertainment. The Klorp."

"Ah, yes. The Klorp." For now, Tenesdo could put aside the thoughts of Poneel. He would have his first and last amusement as a Lux-class passenger. *The mating of the Klorp*. He smiled as he realized that, for moments at least, he would know paradise after all.



A CLOCKWORK LEMON

by A.
Bertram
Chandler

art: Jim Odibert

Captain Chandler writes that (as of August, 1981), he is still working on the Australian novel, but hopes to get it finished before the end of 1981. Then Commodore Grimes will be recalled from his Long Service Leave and signed on for another series of misadventures.

As the twentieth century lurched towards its close, the Power Crisis steadily worsened. Fossil fuels were almost as extinct as the living organisms whose tissues had been converted, millennia ago, into oil and coal. After a series of disasters, not unconnected with sabotage and terrorism, the use of nuclear fission as a power source had been abandoned throughout the world. Nuclear fusion was still just around the corner. Solar power would be practicable only after the skies were clear of the dust flung up during the planetwide outbreak of vulcanism.

All industry was hard hit. Hardest hit of all were the automobile manufacturers. Desperate and ingenious expedients were tried in the endeavour to keep wheels on the road. There were the sailmobiles—but few motorists possessed yachtsmanlike skills. There were the pedalmobiles—but as nutritional standards had been steadily declining, few men or women had the strength and endurance to propel even a lightweight construction of aluminum and plastic for more than a kilometre.

It was the Japanese who came up with what was hoped to be a solution to the problem. A very old man, the great grandfather of a vice president of one of the major Nipponese automobile manufacturers, remembered a car that had been made in Japan in the late 1920s. It had been intended for export to what was then British India. It was to be a runabout in which the mem-sahib could do her shopping or make her social calls. It had a clockwork motor. In a country such as India was in those days there would be no shortage of cheap coolie labor to keep the thing wound up. And, said the centenarian, with unemployment rife in every country there would be no shortage of labor for such a task today.

Plans and specifications were unearthed in the Patents Office. The original design was improved upon. The prototype was built and performed successfully. It would be ideal for use in most big cities. (It was realized, though, that it would never sell in San Francisco.)

Soon traffic jams—which, for a few years, had been almost forgotten—returned to the streets of Tokyo. Soon other countries were expressing interest in the clockwork vehicle.

Australia was the first nation to place large orders for the new car. But the vehicles could not be imported on the hoof and would have to be assembled by local labor. Nonetheless arrangements were made and contracts signed. The first consignment of completely disassembled clockwork cars was loaded aboard Japan Airlines' big cargo-carrying dirigible *Ferdinand Maru*. (Named after the Graf

Ferdinand von Zeppelin, not that other Ferdinand.) The great ship lifted from Narita and commenced her voyage south to Sydney. Although, by this time, airships were once again a familiar sight in the skies, a sizable party of journalists—press, radio and TV—gathered at Townsville, on the Queensland coast, over which city the ship would pass. It was the nature of her cargo that made this a newsworthy event.

Meanwhile the captain of the airship was having his troubles. Slow leaks had developed in two of the helium gas cells. He endeavoured to maintain altitude by aerodynamic lift but his ship was falling. He dumped all his water ballast and, for a while, thought that he would be able to reach Sydney. But the leaks worsened. He ordered the dumping of consumable stores, even to the last grain of rice, and stood on. Again he was losing altitude. The personal possessions of the entire crew were the next to be sacrificed.

As he approached Townsville he made his Big Decision. He would have to jettison cargo. Good airshipman that he was, he realised that the dumping of entire crates would mean an uncontrollable rise, possibly even to pressure height. He instructed his chief officer to break open the containers and to throw their contents out through the open cargo bay doors piece by piece until ordered to stop. The crates handiest to the doors were those in which the clockwork motor parts were packed.

The crew set to work with a will—and soon it became obvious that there was more need for speed than discretion. Handfuls of toothed wheels were flung out of the ship. And still she was falling, although more slowly.

The assembled journalists, on the roof of Townsville's tallest building, could see that there was something wrong. They stared in bewilderment at the glittering shower descending from the open doors. One of them, who was using a powerful pair of binoculars, realized the lethal potential of the metallic rain.

"Take cover!" he yelled. "It's raining Datsun cogs!"

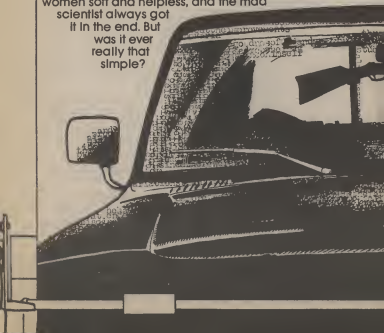


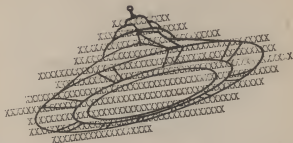
THE LAST THRILLING WONDER STORY

by Gene Wolfe

art: Jack Gaughan

Come with us now to the pulps of yesteryear,
where men were strong and silent,
women soft and helpless, and the mad
scientist always got
it in the end. But
was it ever
really that
simple?





"All right, Brick, I'm ready for you now."

"Hup!"

"You're an ex-Marine, right?"

"Yes, sir!"

"Six four, two twenty, curly red hair, rugged but honest face, fists like hams."

"Pavement breakers, sir."

"How's that?"

"I'd rather think of them being like pavement breakers, sir."

"Okay, pavement breakers. Your name is Brick Bronson—"

"What's yours, sir?"

"Gene Wolfe. And you're in love with this girl called Carol Crane. You've never met her, but you're in love with her. Her father is Dr. Charles Crane, the great biochemist. Dr. Crane has invented this serum that will save tens of billions of human lives—"

"Billions, sir?"

"Over the long haul. Say in twenty or thirty years. And a big pharmaceutical company is out to take it away from him. Their hit man is John Slade—"

"Got it."

"Meanwhile, aliens in a flying saucer have landed. They need the serum too, and they want to take Dr. Crane back to Rigel to make the serum there. There's a mixup—everybody's fighting everybody else. You and Carol are kidnapped to Rigel on the saucer. You see strange but beautiful stuff there. Between the two of you, you fix up the Rigelians' problems—"

"Right, sir."

"They bring you back and you use Rigelian superscience to rescue Dr. Crane in an apocalyptic struggle. The End."

Brick stroked his massive jaw.

"Sir!"

As he climbed into his faithful Ford pickup.

"Sir?"

"What's the matter, Brick?"

"Sir, where am I going?"

"Out to Dr. Charles Crane's famous Research Ranch to see Carol. You get there just as Slade arrives, and—"

"Sir, I don't even know Carol, sir. You said we haven't ever met. I'm just in love with her. I guess I saw her picture in the paper."

"So you want to meet her, get to know her. You can pretend to be a reporter or something."

"And, sir, if it's all right with you, I'd like to drop by St. Michael's

and light a candle first. After all, if there's going to be gunfights and all that—"

"How the hell do you know about gunfights?"

"I saw the deer rifle in the back of my pickup, sir. And going to Rigel. Rigel's an awful way away, sir. Hundreds of light-years, maybe thousands—"

"Catholics don't light candles anymore, Brick."

"I do, sir. I'm Irish, and my mother—"

"For Pete's sake! Bronson's not an Irish name."

"What kind is it, sir?"

"It's a pulp name. Now get going."

Brick stroked his massive jaw as he climbed into his faithful Ford pickup with the .30-30 hanging over the rear window. Almost savagely, he kicked the engine to life. The sun hung heavy over the dusty streets of San Franco as he pointed the rusty hood toward the mountains and the famous Research Ranch of Dr. Charles Crane. Palms drooped in the heat.

Abruptly, he jerked the wheel to the left. St. Michael's was only a few blocks out of his way. He was not a regular churchgoer—the ritual of the mass soothed him, but the improvements and variations irritated and distracted him, and since there were now more improvements and variations than ritual, he had scarcely attended since his discharge. Yet he had never truly doubted the existence and the goodness of God; and as he drove he imagined himself on his knees before the Holy Virgin while the bright flame of a newly lit candle proclaimed his devotion, the purity of his intentions toward Carol Crane.

The ground shook beneath his truck. A fissure appeared in the baking asphalt. He slammed on the brakes, throwing the pickup into a screaming skid-turn before it stopped. Tiles slid from the roof of a Spanish-style stucco house and crashed on the ground below. Someone screamed. All up and down the no-longer-sleepy street, people were running out of doors.

For reasons he could not have explained, he got out of the truck. The main shock hit just as his feet touched the ground, and it knocked him flat.

There is no other sound on earth like the collapse of a large building. He had never heard it before, but he heard it now, and he knew instinctively what it was.

"You all right, son?" The speaker was a fat man in a light blue sports shirt.

"Yeah, I'm okay." Brick scrambled up. "Just got knocked off my pins."

"Wonder if it cracked my slab," the fat man said. He was looking speculatively at a small white bungalow.

"Something fell down."

"Uh huh. I heard it." The fat man continued to stare at his house.

"I wouldn't go back in there, sir. It might not be over yet."

When the fat man did not answer, Brick started down the street on foot, ignoring the chattering, half-hysterical people who had fled their homes. Despite what he had said, he did not believe there would be more shocks. The quake had come, and it had done what it had been intended to do.

As he expected, St. Michael's lay in ruins, stone tumbled upon stone. Save for the fine haze that still hung over its destruction, it might have been sacked by the Goths, pulled down by Gaiseric and his Vandals. "It's a real mercy," a woman told him. "Nobody inside. Father always locks up after the last morning mass."

"I didn't think they were ever locked," Brick said absently. "Guess I couldn't have gotten in anyway." He began to pick through the rubble and after five minutes of searching discovered a small statue of Mary the Mother of God holding the infant Jesus in her arms. The thumb of one hand and the head of the infant had been broken off. Mary's nose was battered. He pulled the statue upright and for a moment knelt before it, crossing himself twice.

The ranch house was big and sprawling, partly fieldstone, partly wood. Behind it, obscured by the bulk of the house, stretched a long, low, almost windowless wooden building that was presumably Dr. Crane's lab. Brick parked the truck beside a van and climbed out. A tall man with glossy black hair stood in the doorway watching him, arms folded, legs a bit too wide. Seeing him, Brick waved; the tall man conceded him no answering gesture. There was a stink like an open sewer—the reek of the corpses in a certain field of upland rice.

"Good morning, sir," Brick called when he was closer. "I suppose you're Dr. Crane. My name's Brick Bronson. I'm a leg man for the *San Franco Sun*." Under his breath he added, "Or something."

The tall man in the doorway continued to watch him without replying. Brick was suddenly conscious that although the tall man's face appeared in repose, his eyes were blazing; their stare carried an almost palpable heat.

"I'd like to talk to you about your daughter."

"It is true that I have a daughter," the tall man said, nearly whispering. "But you would not wish to speak of her if you were wise. Certainly you would not wish to see her. My name is Lucifer Satanus."

Brick stretched out his hand.

Lucifer smiled at it. "That will not break my pavements," he said. "Despite so many wild rumors, they are not laid of good intentions—which are, in my experience, quite easily broken. And I will not take it in mine, since that would be so painful for you. In return, I ask you not to make a certain disgusting gesture while in my presence. We both know the one I mean, do we not?"

"You're the devil. I must be dreaming."

"I am the Devil, in the sense that I am the emperor of all devils, the Angel of the Bottomless Pit. More to the point, as you shall see, I am the Prince of Sin. You are acquainted with sin, are you not?"

Brick nodded.

And the Devil laughed. "Ah, yes, those leaves in Saigon. Childish. You shall be better acquainted with it soon. You said you were dreaming. It is not now that you are dreaming, but when you thought you could appeal to a Higher Power, and that He would protect you from your author. Not in this world, Brick. By doing as you did, you have transformed yours into a religious story, and so released me upon yourself. Do you understand?"

"I'm afraid I do."

"I am gratified. By the way, the author has just informed me that you are torn between the desire to make that gesture and the urge to strike me in the face. Neither will be effectual, and there is one more thing I should tell you before I go. Earlier you were led to expect the Rigelians. They will not appear. I am here in their place."

Brick's big fist fanned empty air. As he stood staring at the spot where Lucifer Satanus had stood, he heard footsteps from inside the house. A rather stooped, white-haired man appeared, glanced at the open door in some surprise, and came to greet Brick. "I thought it was getting warm in here," he said in a gentle, cultivated voice. "Someone's been letting our air conditioning out. You didn't by any chance open this door, did you, young man?"

"No, sir. It was open when I pulled in. I was just about to ring your bell."

"Strange." The white-haired man hesitated a moment looking at the door, then extended his hand. "I'm Charles Crane, by the way."

"Brick Bronson. It's an honor, Dr. Crane."

"Brick? Really? What an unusual name."

Brick flushed. "Really it's Roscoe. But when I was a kid somebody started calling me Brick. With a name like Roscoe, you can see why I stuck with it."

The scientist smiled. "I do indeed. I shall call you Brick, and I hope you'll call me Charles. Now won't you step in out of the sun, Brick?"

West and east, supposed never to meet, met in that room. There were horns and antlers on the walls, and wide chairs covered with saddle-skirting; a Steinway grand and Dresden figurines.

"It's a trifle mussed now," Dr. Crane said, seating himself in the largest of the leather chairs and glancing at the untidy newspaper lying beside it. "This is one of Juanita's days off. But do sit down, Brick. What can I do for you?"

Brick cleared his throat. "When you saw that open door, Doc . . ." He hesitated.

"Yes?"

"Well, you said, 'Strange.' Something about the way you said it made me think that there had been other strange things going on. I'd like you to tell me about them."

For a moment the scientist's white eyebrows rose in two little arches; then the corners of his mouth followed them. "All right," he said. "I don't see what harm it can do. A good many of the rooms of this house overlook the valley—possibly you noticed that on your drive up. There have been some odd-looking lights down there and some more in the air over our mountain."

"UFOs?"

"Flying objects that I, at least, cannot identify, yes."

"I don't think you have to worry about those anymore, Doc. But I don't think those were what was worrying you, mostly. You'd be curious and excited about saucers, if there were any such thing."

"You don't believe in them?"

"Not now, no. What's the real problem, Doc?"

The white-haired scientist shrugged. "Just a feeling of being watched. Paranoia, if you like. Then once, when the feeling was very strong and I stopped what I was doing and looked about, I could almost swear I saw the flash of binoculars up on the mountainside."

"I understand."

"I hope you do, young man, because I don't. Now I've answered your question, and I'm going to ask you one of my own. Why are you here?"

Brick hesitated. "I know about your work: the serum."

"There was something in the newspaper, I believe."

"Down in San Francco I've heard some rumors. Third- and fourth-hand stuff, but somebody's after you, Doc. Somebody with money and an organization. They want that serum bad."

"In a few months, when I've perfected the process, they will only have to ask. I intend to offer my serum to humanity without charge."

"I don't think they want it like that. They want it all, and that's why I'm here. With me around, I don't think they're going to get it unless you want to give it to them."

"You're offering me your services as a security officer. Have you credentials?"

"Maybe none you'd find convincing. The Silver Star, and a few boxing and marksmanship trophies. But you can judge for yourself if I'm qualified. Let me stay here and keep an eye on things for you, and when you've had a chance to check me out, we'll talk about pay. If you don't think I've earned any, I'll be on my way."

"I'll have—"

A radiantly lovely girl stepped into the room, then hesitated. "I'm sorry, Dad. I thought you were alone."

"It's quite all right, Carol. This is Mr. Bronson. He'll be staying with us for a few days at least."

That night in the guest room Brick cleaned and oiled his Winchester before preparing for bed.

"Sir! Mr. Wolfe, sir!"

"For Pete's sake, Brick. You'll wake everybody up."

"They can't hear me. They're on another part of the page. Listen, sir, the old guy's nice enough, but I came out here for the girl."

"So what?"

"I got a fifteen-second look, and the next thing I know I'm up here with this damn gun. Sir, you laid the Devil himself on me. They don't come any rougher than that. Don't I have any rights?"

"No. Not one single goddam one."

"Sir, I'll die."

"I won't let you."

"Not that way, sir. I'll die inside. I'll turn into a store-window dummy and a tape recorder. Pull the string and I say my lines, push me over and I'll never get up."

There was a soft tap at the door.

"Come in," Brick called. "It's not locked."

Carol entered, closing the door swiftly behind her. She wore a quilted robe. "You'll think I'm terrible," she said. "But I have to talk

to someone."

"I couldn't think you were terrible under any circumstances," Brick told her.

"It's Father. He's in danger."

"I know."

"He's been getting things in the mail. Notes . . ."

"Threatening letters? He should have showed them to me."

"I think he's destroyed them. But he's afraid. You don't know him, Brick, but I do, and for the first time in his life, he's frightened. He's had a burglar alarm installed in the lab, and he's talking about getting a watchdog."

"He's got one now. Me. You don't have to worry anymore."

"Brick, I want him to die. But—"

A shot rang out.

Brick was off the bed and out the door in one long jump, the Winchester in one hand and half-a-dozen cartridges in the other. The moon, shining through the windows, provided just enough illumination for him to find his way in the unfamiliar ranch house.

To his left he heard the sob of indrawn breath, then the unmistakable sound a rifle bolt makes as it is drawn back to kick out empty brass and shoved forward to bring another round into the chamber. He had already slipped his own cartridges into the magazine; now he jerked down the lever and brought it up again.

"Brick? Is that you?" Beneath the words hung the familiar reek of gunsmoke.

"Yeah, it's me, Doc. You okay?"

Light streamed from an open doorway. "I'm fine, Brick. But I don't think our friend here is in such good shape."

Still in a half crouch, Brick sprang into the room. Dr. Crane was standing near an open window, a Springfield rifle in one hand and a small black automatic in the other. He held the automatic up. "Do you know about these? Is it going to fire?"

"A PPK. Not unless you give the trigger a good hard pull." Brick took the automatic and thrust it into his belt, then glanced down at the man who lay at the scientist's feet.

He was small and dark, like his weapon, with a fuzzy beard that concealed most of the lower half of his face. His moccasins were worn, his jeans ragged; one side of his faded denim shirt was soaked with his blood.

Brick knelt beside him. "Better get on the phone, Doc. Get an ambulance up here."

Carol's voice said, "I'll do it."

"Thanks."

Bending over Brick and the wounded man, Dr. Crane asked, "Do you think he'll live?"

"He might. He's young. I've seen them hurt worse than this and still pull through. And I've seen some that weren't hit this bad die. Right lung's collapsed. You have silvertips in that rifle?"

The scientist shook his head. "Full jacket. Target ammunition. I was going to sight it in before elk season opened."

"That saved him." Brick rolled the wounded man over and slipped a wallet out of his hip pocket. "A silvertip would have blown out a hole the size of your hat, and he'd be dead already. You have first-aid supplies here? Gauze or tape? We can at least slow down the bleeding."

"Yes," Dr. Crane said. He seemed irresolute. "I'll get them." Brick flipped open the wounded man's wallet, glanced at the contents, rubbed the side of his nose with one finger, then looked again.

When Carol returned, adding her own soft perfume to the pure desert air that floated through the open window, he had already staunched the flow of blood. She asked, "Do you need anything else?"

"A blanket to keep him warm. He's in shock."

She brought a striped Indian blanket from the sofa and helped Brick tuck it around the wounded man and raise his feet.

"Ambulance say they were coming?"

"Right away, they said." She paused. "But it's about twenty-five miles."

Brick glanced at his wristwatch. "Half an hour."

"I suppose. You can't do anything more for him?"

"No. He needs to get the blood out of his chest cavity, and any pieces of cloth and bone that may be in there with it. I don't think we have to worry about the bullet—it made a clean exit. Then the lung could be patched and reinflated and so on. But we don't have the equipment for any of that."

"Who is he, Brick?"

Brick grinned at her. "I'm glad you asked. I was trying to figure out how to ask you if you knew him."

Carol shook her head.

"According to the stuff in his wallet, his name's John Slade. That ring any bells?"

Carol shook her head again. "I don't think I've ever heard of him."

They both turned at the sound of footsteps. It was Dr. Crane, still carrying his rifle.

"Where've you been, Doc?"

"Outside." The scientist dropped into a chair. "I thought there might be more."

"That was a hell of a risky thing to do."

"I doubt it. You say they want the formula for my serum, and if that is the case, the last thing they would be apt to do is to kill me before they get it."

"Sounds logical. I just hope they make as much sense as you do."

Under her breath, Carol murmured, "He wants to show you he's as brave as you are."

Brick gave no indication of having heard her. "Find anybody?"

The scientist shook his head. "No. No one."

"How'd he get here? Car?"

"I didn't see one. Do you know, I never thought of that?"

"No horse? Nothing?"

"I didn't see any. No."

Carol said, "Could he have been landed by helicopter?"

"Not close, or I would have heard it," Brick told her. "Of course, they could have dropped him out in the desert a mile or so. Or somebody else could have been with him—somebody who drove his car away when he heard the shot. Doc, does the name John Slade mean anything to you? I've already asked your daughter."

"Is that who he is?"

"His wallet says so. Belongs to a lot of environmental groups and conservation clubs. Know the name?"

The scientist shook his head.

"How about the face? I don't want to have to turn him over again, but you saw him before, and if you look, you can still see him pretty well."

"Perhaps without the beard. But I doubt it."

"John Slade wasn't the name signed to those threatening letters you got?"

Dr. Crane's head jerked up. "How did you know about those?"

"Just a shot in the dark. You were worried when I came here, and tonight you were jumpy enough to grab a loaded rifle when you heard Slade here outside—"

"I didn't hear him. I saw him in the moonlight."

"Swell. Instead of going to bed or reading or maybe watching TV, you were standing around looking out of windows. That has to be something more than some guy up on the mountain with field glasses. Hell, that could have been a bird-watcher or somebody on the lookout for the UFOs. I figured you'd been getting letters or phone calls. Maybe both, but people don't usually sign phone calls."

Laying his rifle across his knees, the scientist ran both hands through his abundant white hair. "I see. No, John Slade wasn't the name."

"What was?"

The scientist ignored the question. "The most recent came today, in the mail. They've all been mailed. About six, I think. Perhaps seven. It said that he had found someone to kill me, and he would send him, have him do it, unless I—"

"Go on, Doc."

"Unless I made a certain gesture of surrender. Set fire to my laboratory."

Brick whistled softly.

"I couldn't do it, you understand. I wouldn't do it. Literally, I would prefer to die."

Carol was stroking the wounded man's cheek. "Brick, his skin is clammy. Damp and cold."

"That's shock. There's nothing we can do besides what we've already done."

"Shouldn't we be hearing the ambulance by now?"

Brick glanced at his watch. "Not yet."

"I know they shouldn't be here yet, but shouldn't we hear them? At night we can hear ambulances and fire engines way down in the valley."

Brick's shoulders moved a sixteenth of an inch. "I wouldn't know about that. Doc, I'd like to see some of those letters."

"You can't. I burned them. I didn't want Carol to find them." The old scientist hesitated. "I suppose you killed a great many men in Viet Nam. I—I've hunted all my life, but I've never killed anyone before."

"You still haven't. If that meat wagon gets here in time, there's still a chance he'll pull through. You burn the envelopes too?"

Dr. Crane nodded.

"You happen to notice where they were postmarked from?"

Dr. Crane nodded again. "From San Franco, all the postmarks that could be read."

"I see. Doc, I've been waiting for you to tell me how they were signed, but it seems like you're not going to unless I ask you. So don't tell me it was the Blue Avenger or some crap like that. You recognized the name?"

The old scientist laughed. It was a dry sound, humorless as the shaking of a pebble in an empty jar. He stood and, still carrying his rifle, started out of the room. "Yes," he said over his shoulder. "Yes,

you could say I did."

Brick glanced at Carol, but she seemed as puzzled as he. After a moment he asked, "Is there any chance he'll kill himself?"

"I don't think so," she said. There was an edge of bitterness in her voice.

"But you wish he would."

"Sometimes, I suppose."

"You don't act like it when he's around."

She bit her lip. "Brick, maybe sometime I'll explain. But this isn't the time or the place, and I've only known you a few hours."

"It may be the only time and place we'll ever have," he said gently. "The story may be over soon."

"What are you talking about?"

He managed a rueful little shrug. "Things are happening fast tonight."

"I know what you mean."

"You and I could climb out this window, just like Slade climbed in. We could walk around in the desert in the moonlight, holding hands. But it would mean leaving him, and he might start bleeding again."

"We can't do that."

"I know we can't. And so I thought maybe we could pretend we did, if it was all right with you. Carol, when they were flying me overseas, the plane had a little trouble, and we set down on some little island in the Pacific. I don't even remember the name of it now."

She watched him, her blue eyes as serious as his.

"There was a landing strip there left over from World War II. They still maintained it, and once or twice a month a mail plane came and so forth. We stayed there a couple of days until they could fly in a part for one of our engines. There were a lot of birds on that island, and it was the mating season."

He paused and chuckled softly. "They would pair off and kind of bob up and down at each other, and keep it up for hours. Sometimes one would go get an oyster shell and lay it at the other's feet. I guess the one that carried the shell was the male, or maybe they both did it. Anyway, there was an ornithologist—a bird scientist—who'd come to study them. He was taking pictures and stuff, and one day I got to talking with him."

"Yes, Brick?"

"I asked why they did it, why they bobbed up and down like that. And he told me they had to. It didn't matter how much they wanted

to get together. To mate. If they didn't bob up and down like that, they couldn't do it."

"That's sad, isn't it? Sad, and a little funny. But I don't understand why you're telling me about it now."

"I just meant that we're people, not birds. If I could bring you candy and flowers and take you someplace to dance—or for a walk in the desert in the moonlight—that would be nice. But we don't *have* to do it."

"You want us to—to be lovers? With this man bleeding on the floor?"

"I want us to be sweethearts. Sweethearts love each other, and they trust each other."

Carol hesitated, then raised a finger to her lips. "Shh! Dad's coming back."

Dr. Crane seemed more relaxed now. The rifle was gone; so was his suit coat. He dropped into a chair and looked benevolently and distantly down on the two younger people. "Is he going to die?" he asked.

"If that ambulance doesn't get here pretty soon, he is, Doc."

"Good."

Carol's hand flew to her mouth. "Dad!"

"You want him to die, Doc?"

"Of course I do. He came into my house to kill me."

"Then you should have put another bullet in him."

"I suppose I should have. At the time I was too shocked. I saw him outside the window, you know. And I recalled reading somewhere that it was best to wait until a prowler had actually entered, that there would be less difficulty with the police that way." The scientist tittered, then seemed to bite the shrill laughter back. "And so I waited. He silhouetted himself ever so nicely against the moon when he climbed over the sill. Just like one of those man-shaped targets you see at the range."

Brick walked over to him and looked into his eyes. They were blind circles, like two flecks of blue paint.

"I waited until I heard his foot on my floor—a little, shuffling sound. Then I squeezed off the shot. Actually, I couldn't aim very well. That scope isn't meant for shooting in the dark."

"He's high," Brick told Carol. "Do you know what he uses?"

She shook her head. "I've seen him this way before, but not often."

"In Nam I saw a lot of heroin and hash, but they don't talk that much on heroin, and hash doesn't do that to your eyes. What is it, Doc?"

The scientist giggled and shook his head.

"Come on, what did you shoot up on? Morphine? If you've got some, it might help this guy here."

Unexpectedly, the wounded man stirred.

"I won't say," Dr. Crane told Brick. "And you can't force me to. At this very moment there is a curtain—a wonderful curtain, invisible, beautiful, the strongest and most beautiful invisible object ever seen—between myself and yourself. Between myself and the world. Do you wish to burn my arms with cigarettes? Please go ahead."

"I've quit smoking, Doc." Brick had already turned away to see to the wounded John Slade. Slade's eyes opened, fluttered closed, then opened again.

"It's okay, buddy," Brick told him. "You've been hurt, but an ambulance is on the way. You've lost a lot of blood, that's all. Don't try to get up."

Carol grasped his arm. "Brick, listen! Don't you hear it?"

A muted whine, faint as the scratching of a stereo needle when the record is over, floated up from the valley and in through the open window, a distant siren's song.

Brick nodded. "Sounds good to me."

"We can't let them see Dad. We've got to get him out of here."

"Not until I find out what I've got to. Doc, you said you recognized the name on those letters. Whose was it?"

"The name I know best . . ." The words trailed off into high-pitched laughter.

Brick slapped the scientist's left cheek. The smack of his callused hand might almost have been the report of a small gun.

"You're going to have to tell me, or I won't be able to help you and your daughter. No matter how high you are right now, you must know that you're going to have to come down sometime."

The scientist giggled until a second blow snapped his head back. A trickle of dark blood stained his chin.

"If I'm not able to help you then, you're going to have a lot worse problem than some ambulance guy who saw you stoned."

"Which is my own, of course," Dr. Crane murmured. "Charles C. Crane, Ph.D. That is how they were signed, you see, young man. My own name. My signature. My handwriting."

"You wrote them yourself?"

The scientist stared off into space, watching something no one else could see.

Carol said, "Brick, he couldn't have!"

"Sure he could. Funnier things have happened."

"But why—"

"You don't like him and I don't like him. Maybe he doesn't like himself much either. He get into town often?"

"Hardly ever."

"There's no box out at the road. How does he get his mail?"

"We have a post office box in town."

"I thought so. Who picks the mail up?"

"I do. I mail his letters too, and they're letters I've typed myself. If he had written anything by hand, I would have noticed it."

"When I came here today, he said something about a housekeeper named Juanita. Said she was off. Does she go into town to shop?"

Carol nodded. "Groceries and things. But, Brick, Juanita can't drive. I have to take her in, in our van. I drop her at the supermarket, do my own errands and pick up the mail and any supplies Dad may have ordered—there's a scientific and medical supply house in San Franco—then come back to the market and get her. Today I drove her to her sister's in Rio Lodo."

Brick stroked his chin. "Somebody's forging his handwriting, then. That's what it looks like."

"But why would anyone want to do that?"

"For the psychological effect, I suppose. It seems to have worked. It should be pretty unsettling to realize that somebody who's after you can write letters, checks, or whatever, using your name, whenever he wants to. Besides, it might throw the police off, so if you're going to disguise your handwriting anyway, why not disguise it as your victim's?"

The twitching of the wounded man's face drew their attention. Hoarsely and almost unintelligibly he said, "Not forged."

"What's that?" Brick bent over him.

"Not forged." He gasped for breath. "He . . . Xerox . . ." The whisper trailed away.

"What the hell does that mean?" Brick muttered.

Carol suggested, "That the letters Dad has been getting are really copies of letters he once wrote someone else?"

Slade gasped, "Please. Terribly thirsty."

"Get him a glass of water," Brick said. "I'll roll him over and try to hold him up a little."

The song of the siren was much louder now as the ambulance wound its way up the mountain road. Brick listened to it, and to the whisper of Carol's slippers as she went into the kitchen. Dr. Crane slumped in his chair. "Sin," Brick said to himself. "Lucifer

Satanus, Prince of Sin, you did all this to us. Dope. Attempted murder. Lies. But if you're real, He has to be real too."

He looked down at the wounded Slade to see if he was being overheard, and realized that he was not in fact speaking. Or rather that the Brick who spoke was an inner Brick, a sort of operator animating the clay figure that supported the wounded man. This second, inner Brick reached beneath his shirt for the silver medal his mother had once given him, then remembered that he had lost it in a rice field almost ten thousand miles away.

"This stuff isn't going to help you, Brick."

"If the Devil's real, sir, there has to be a God too. The Devil had to be cast out by someone."

"Now you're a theologian. You're supposed to be an ex-Marine."

"Sorry, sir."

"There is no God for you, Brick, and your Devil wasn't cast out by anybody. He was cast by me, and cast into your life by me. If you've a God at all—never mind."

"Here, Brick darling." Carol handed him a glass of cold water. "If you don't think it will hurt him."

"Not if he sips it. It's not a stomach wound." Brick held the glass to Slade's lips. "Carol, you called me darling."

"It slipped out, I guess."

"I hope it slips out often."

"Careful, you'll drown him. Oh, Brick!"

"What is it?"

"Why did we have to meet like this? It could have been so much nicer."

"Because I fished a statue out of the rubble this afternoon."

"I don't think I understand."

"And I can't explain, Carol. Not now, anyway." He put down the glass. "Will you kiss me, Carol? I've loved you from the beginning, and I've got a feeling it's the only kiss we'll ever get."

She kissed him. Somewhere down the mountain road the ambulance rounded a beetling outcrop. Its siren was suddenly louder, rising and falling like the whooping of a wolf.

"Again," Brick pleaded.

"They're coming. I have to get Dad out of here. I'll lock him in his bedroom." She hurried over to the narcotized scientist, seeming to pull him erect by main strength.

Brick felt the PPK slipping out of his belt and began a frenzied

judo chop with his right hand.

The sound of the shot filled the room, springing back from the walls with doubled force. The little German automatic went skittering across the carpet. Brick dropped Slade and leaped to his feet.

For an instant, he thought the shot had missed. Then, very slowly at first, Dr. Crane began to crumple. A red stain spread across his white shirt.

Carol released him and backed away, hands covering her face. Slowly, then, it seemed, very fast, the old scientist pitched forward on his face. Outside, the ambulance ground to a stop.

"Sorry. Really sorry . . ." The whispering voice was Slade's.

Brick demanded, "Why did you do it?"

"Would've . . . killed us all. Killed . . . world. He would. Told me. Billions of lives . . ."

There was a sharp knock at the door. "Let them in," Brick snapped to Carol. He bent over the wounded Slade. "What are you talking about?"

"Crane serum would've saved billions. No room. No more animals, plants. We'd be—" the wounded man gasped for air, "—standing on everybody's shoulders. All have died."

"So you came here to kill him first." Brick heard the door open, the confused footsteps of the paramedics.

"Dr. Crane told me . . ." Slade's whisper was nearly lost. "Burn lab . . ."

A paramedic grasped Brick's shoulder and leaned heavily upon it as he bent to peer at Slade. "What happened to him?"

Slade sighed, "No space . . . for billions. Not till we get into space. Dr. Crane . . ."

"Gunshot," Brick told the paramedic. "They shot each other." It sounded so simple when he said it that way.

"He won't make it," the paramedic said. Swaying a little, he straightened up.

"Goddamit, aren't you even going to try to save him? Give him plasma?"

"Won't make it," the paramedic said again. "Going into coma now. DOA for sure."

"Brick," Carol called, "what's the *matter* with them?"

The other paramedic said thickly, "What's the *matter* with *you*?"

Brick stood. "Drunk, I think. I don't smell it on them, so it must have been vodka, or maybe medicinal alcohol."

"Listen, Mac," the first paramedic said. "We're not drunk. Sure, we had a couple, but we're not drunk."

"Fine," Brick told him. "Get this guy some plasma. What about the old man?"

"Old guy's DOA," the second paramedic told him. "No respiration, no pulse. Got a bullet in the belly and his heart gave out."

The first paramedic said again, "Listen, Mac, we're not drunk. You know what we've been doin' all day? You know?"

"You got plasma in your ambulance?"

"We've been draggin' the bodies out. That's what we've been doin'. Had a big quake down in San Franco, see? Eight point one on the Richter scale. Women. Kids. My God, you should have seen them."

Brick took him by the arm. "Let's go get some plasma," he said wearily. "This man's still alive."

"That man's dead," the paramedic told him. "He just hasn't stopped breathin' yet."

They got the needle into Slade's arm and carried him out to the ambulance, then took out Dr. Crane.

"He did it to me," Carol said softly. "When I was just a little girl. About once a week for a year. Finally, Mother found out and made him stop. I've never been able to forgive him for that. I was hoping . . . But I still can't." She shuddered. "I suppose I never will. Oh, Christ!"

The second paramedic stumbled and dropped his end of the stretcher. Dr. Crane's body rolled off onto the graveled drive. With the sheet pulled partially away from his face, he appeared to be wearing a surgeon's mask.

Brick turned Carol around until she could no longer see the corpse. "Why did you stay?"

Her shoulders moved up and down under his fingers. "It doesn't matter."

"Okay."

She drew a deep breath. "Brick, we'll be rich. I know where he kept the formula for his serum—a brown notebook in his desk in the lab. He was just working out a system for making the serum in quantity, and any pharmaceutical company could do that. It virtually eliminates the onset of degenerative diseases. People will pay anything for it. Think of all the rich old men."

"He was going to give it away," Brick told her.

"For the prestige! That was all he cared about. Medals, the Nobel Prize. He wanted somebody to endow a real research center for him, where he could boss a big staff."

"Sure," Brick said.

The first paramedic was bending over Dr. Crane. "Hey!" he called.

"The old guy's heart's started again. Shock must have done it." For a second he stood there blinking, trying to reason through an alcoholic fog. "I'll give him some oxygen. Might have some brain damage, though. He was out quite a while."

"Give the other one some too," Brick instructed him. "It might help."

"It might at that."

Brick helped them get the old scientist into the ambulance, watched the first paramedic fumbling with his oxygen equipment for a moment, then closed the rear door. The second paramedic stumbled toward the cab.

Brick asked, "You going to drive?"

"Guess so. Al's busy back there."

"Al drove up?"

The second paramedic nodded.

"With you getting smashed most of the way. You're in no shape to drive. The girl will drive for you."

"My bus? Forget it."

Brick hit him so hard his feet left the ground.

Carol opened her mouth to scream, then shut it again. Brick said, "Think you can drive this? Shouldn't be much different from your van."

"I—I suppose so."

"Sure you can. I'll put him in front with you. I think I broke his jaw, and that will give him something to worry about if he wakes up."

"Brick! Aren't you coming too?"

"I'll follow you in my pickup," Brick said. "Otherwise we won't have any transportation once we get to the hospital. I'd drive, but I don't know where it is. Now get going."

He stood in the road and watched the ambulance's red tail lights until they vanished around a bend. A few seconds later, the siren came on. Carol had found the switch, he reflected.

There was a galvanized scrub bucket in Juanita's kitchen. He used his pocket knife to cut the hose from the rinsing nozzle on the sink. In the living room, where two men had nearly died, he found Slade's PPK under a sofa and thrust it into his belt again, then retrieved his Winchester from the corner where he had left it.

Back outside, he hung the Winchester on its mounts in the back of the pickup's cab and siphoned gasoline from the tank until the bucket was half full. Over a gallon, he figured. Nearly two bucks' worth. Carefully he positioned the bucket near—but not too near—the



back of the laboratory, struck a match and tossed it in.

The gas caught with a sound like the cracking of a giant whip. He jumped backward, then sprinted for the shadow of a hillock of boulders and sand. He had no sooner reached it and turned to watch the dancing flames than the giant's fist struck him behind the ear. For an instant he saw the dark ground leaping toward him, but he was unconscious before he struck it.

When he woke, it was to hear a rending, grinding crash. Vaguely he pictured cars meeting head-on outside his dingy room in San Franco, or a car crushed under the wheels of a tractor-trailer.

He shifted his head. Sand grated on his cheek; the night-wind stirred his hair. His hands would not come forward to help him up. After a moment, he found that they were bound behind his back. Much of the feeling had left his arms. He struggled erect without them, rolling on one side to get his knees under him, pushing himself up with an elbow.

The crash had been his pickup. Its hood was buried now in the big double doors at the back of the lab. Orange flames danced along its sides.

"You're awake," a familiar voice said behind him. "Would you like a closer view of the fire? I ran your truck over your bucket of gasoline,

and it really should be quite spectacular."

Brick turned. "Hello, Doc. All right if I call you that?"

"Certainly."

"You look just like him too, nearly as I can see. Except you haven't been shot lately. Twin?"

The second Dr. Crane shook his head.

"Then the Russians or somebody fixed you up to look like him, I guess. Plastic surgery and so forth."

"You are a curious man, whoever you are. Doesn't it concern you that you're about to die?"

"I didn't know I was."

"And you are ludicrously incorrect about the Russians. Appearance, voice, height—I doubt very much if they, or anyone on earth, could do so well." The second Dr. Crane gestured with Slade's black PPK. "Now, forward. Whether or not you care to have a better view of the conflagration, I do."

Brick started toward the burning truck. "I've never had any luck at all with that gun."

"And now you never will."

"Right. I figured, though, that if I made it look like the lab was burning, that would smoke out whoever had been sending the real Doc those letters. I was right about that, anyway."

"You were wrong about that," the second Dr. Crane told him. "I was here already, watching from behind those boulders. You very nearly trampled me when you ran there to hide. Fortunately, the light of the fire you had started in that bucket must have impeded your night vision."

Brick said, "Or unfortunately, depending on how you look at it. You're a clone, right? I've heard of that."

"No. I am a copy. But wouldn't you like to know what I struck you with?"

"Not particularly. This close enough?" The heat of the burning truck washed his cheeks. The laboratory building itself was beginning to catch now.

"Yes, this will do. It was a stone. A common desert stone. Was that courageous of me? A slight and rather elderly man?"

"I guess so."

"But I had no alternative. Had I fled, you would have heard me, pursued me, and almost certainly caught me within a hundred yards. Had I remained as I was, you would surely have noticed me. As it happened, I struck; and in striking, I won. But if I had possessed a pistol of my own, I would have killed my original almost an hour ago, when he came poking about with my—pardon me, his—hunting

rifle. Did he suppose I would come so near my old home as that?"

Brick said, "He was mostly showing off, but the pressure got to be too much for him." He glanced at his burning truck and took a step toward the second Dr. Crane, who stepped back.

"I warn you, if you attempt to run at me, I'll fire."

"Then I won't attempt it, Doc. Tell me about this copying business. Your man Slade said something about xerography, but we thought he meant the letter had been copied."

Momentarily the second Dr. Crane looked puzzled. "Some, ah, people came. Nearly a month ago, now. Our electricity went off, all of it. I thought it was some sort of storm. . . . They landed out there, out in the desert."

He looked sharply at Brick. "I don't suppose you believe a word of this, but it doesn't matter. You'll be dead quite soon."

"Go on," Brick said.

"I was working here in the laboratory, the original I. They came and got me. My daughter and my cook must have been sleeping, and I don't think they ever knew. Presumably, they were not permitted to wake up until the others had left. What is your name, by the way?"

"Bronson."

"I'm Charles Crane, as you know. Mr. Bronson, I'm supposed to be a biochemist, but I don't know quite how to explain. Suppose I were a medieval scribe. I'd spend my days in copying the Bible: beautiful lettering, illustrated capitals. You've seen them?"

Brick nodded.

"And then someone showed me a modern color copier. Lay a page on it—and there it is again, just as good. Or nearly just as good. That was what they did. They wanted me, you see. Or at least, they wanted a Charles Crane to take back to wherever they came from. I can't imagine why, unless they'd forgotten the principles they'd used to build that machine. Or perhaps they had not built it, had got it from some other culture. In any event they made a copy, then wiped an hour or so from the memories of the original."

"But you escaped?"

The second Dr. Crane shook his head. "I was left over, if you wish to put it so. They made me first, I think. I know that I am Charles Cabot Crane. I recall my childhood, college, marriage, my entire career. But when I remember all those things, I know that I would do certain things I did not do at the time."

"I see," Brick said. The fire was advancing in columns along the walls of the laboratory building, blistering their dark paint.

"I don't think I'm a very good copy. Not a perfect copy, at least. They threw me away, just left me behind."

"A little surprise for the real Doc." Brick glanced at the truck again; its steel body glowed with heat. "Why'd you want him to burn his lab?"

The copy smiled. It was almost a pleasant smile. "To destroy his notebook, of course. *My* notebook. You see, there is a flaw in the formula. The serum can be produced, and it will work—stave off cancer, cardiovascular degeneration, and so on. But in less than an hour it goes bad."

"So that was why the Doc delayed making a formal announcement of his discovery. He said he was working on a way to manufacture it in quantity, and that bothered me. Like his daughter said, any of the big drug companies could have worked out a production method, and they probably could have done it better than he could."

"But it could not be made in quantity, you see, Mr. Bronson, until that flaw was eliminated. It had to be made and used on the spot, which rendered it rather impractical. But I, in that last hour, the hour before they landed, found the way to eliminate that flaw. I recorded it in my notebook."

"You mean the real Doc did," Brick told him. "Then the saucer people wiped his memory out, and he didn't look back at that page, because he thought he knew what was on it."

"Exactly."

"And now, you plan to replace him. You know Slade didn't kill him?"

"But he may have brain damage—yes, I overheard all that was said, once you were outside. For my purpose, it could not have worked itself out better. When he is somewhat recovered, Carol will bring him back here; and I will eliminate him and take his place—a miraculous recovery. Not even Carol need know."

"And blame me for destroying the lab. Just in case the brain damage isn't all that bad, or some other scientist shows up to go through his stuff."

"Correct again. The building was locked, so you rammed the doors with your truck. The fire started as a result, and you fled into the desert. And now that I have seen that the fire will do what I want, you and I will indeed go into the desert."

"Where you'll kill me, and hide my body."

"Would you rather I kill you here? I would prefer not to have to drag you a mile or so. But if I must, I will. Walk, and you will have a few moments more—"

There was a shot.

The bullet's impact almost knocked the second Dr. Crane off his feet; reeling, he regained his balance, waved the PPK futilely in the direction of the burning truck.

Brick kicked it from his hand. "You'll never get the guy that got you, Doc. There isn't anybody."

"I'm wounded. . . ."

"Sure you are. If you get a gun hot enough, and it's got a round in the chamber, it'll go off. I've seen machine guns start to fire like that, with nobody pulling the trigger, because a few long bursts had overheated the barrel. My deer rifle was hanging in the back of the truck, and there was a round in the chamber because I jacked one in when I heard the real Doc shoot the poor kid you sent in after him. When you walked me over here, I lined you up with it as well as I could."

The second Dr. Crane was watching the blood that seeped from between his fingers.

"You've been shot in the belly, Doc. Just like he was. It would be interesting to know what's happened to the one in the saucer—I think maybe there's some sort of link between the three of you. But now if you want me to patch you up, you'd better untie me."

The second Dr. Crane said nothing. His face looked gray, even in the reddish light of the fire. Tears trickled down the gray cheeks.

"You don't believe that crap you fed Slade, do you? We'll be saving the best people—engineers, physicists, craftsmen. If somebody'd found that serum in time, we'd still have Einstein, and by now we'd be selling fried chicken on Mars."

The knees went first. The copy's bloodstained hands never left his waist to block his fall. Brick cursed, then dropped to the ground and lifted his hips and legs, kicking and squirming until his knife slid from his pocket.

It took thirty seconds or so to get it open, and another thirty to cut away the electrical tape the second Dr. Crane had taken from his truck. By the time he got into the laboratory, the whole place was full of smoke and chemical fumes. Bottles of solvent were bursting like mortar shells. He tried to recall whether Carol had ever mentioned the location of the desk, tried to hold his eyes open. Soon he could not. He dropped to the floor, hoping to find better air.

"You see what it got you, Brick. You might have been rich and famous, married to a lovely woman. Where is the God you prayed to now?"

"Everywhere, sir. Nowhere. I still haven't seen him."

"You never will."

"But you'll see me."

"What are you talking about? You're burning to death right now, dying of smoke inhalation."

"But He made me real. You'll pass me on the street someday, see me in some crowd. Don't mess with me then. Fists like pavement breakers, remember?"

"Brick, you can never be real. Not real the way I am. When this is over, you'll be left behind on the page."

"You sound a little scared, sir. Maybe you've already felt me close to you in the movie theater, seen me waving at the ballgame, heard my voice around some city corner."

"How did you know that?"

.....

"Answer me, Brick! How did you know that?"

"All right, on TV tonight they showed a man who got pulled out of a fire in California. But his name was Rick, Rick Benson."

"As well as I could hear it."

"That wasn't you, was it, Brick?"

"Brick?"

"Answer me! Brick . . . ?"

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LETTERS

Dear Editor:

Mr. Schadewald (*IA'sfm*, 28 Sep. 1981, pp. 84-95) might have mentioned another reason for the initial rejection of Wegener's continental-drift hypothesis. This is that, while basically right, Wegener had his time scale wrong by a factor of about a thousand. From an erroneous surveying report that indicated that Greenland was drifting westward at 20 meters per year, Wegener inferred that the rate of continental drift was of this order of magnitude and that, therefore, the original Pangaea had broken up recently, geologically speaking. He even suggested that Atlantis was merely the coast of North America before it drifted too far from Europe to be reached in the little ships of the Bronze Age.

Modern measurements, in line with plate-tectonics theory, indicate that the normal rate of plate movement is on the order of a couple of centimeters per year. I have read that the speed record is currently held by the Nazca Plate of the southeast Pacific, which is said to be approaching and diving under the coast of Chile at five cm./yr.

Cordially,

L. Sprague de Camp
Villanova PA

Thanks, Sprague. I did not realize this myself, and I'm glad to add it to the file I keep in my head.

—Isaac Asimov

Dear Editor,

Your December issue seemed as though a disheartening trend might be starting, that of eliminating the major influence of fans. Above all else a fan is a critic; we buy the books and magazines which support the "professionals." It is our duty as well as right to write to any magazine which we actively support stating whether we like or dislike a story or article. We should not be attacked, as Mr. Morganstern was by Avram Davidson, for stating whether we liked a story or not. A magazine is not helped much by letters which state only what is liked, and the letters section suffers even more. I must admit I did not enjoy "Peregrine: Perplexed" but I loved "Waiting for the Morning Bird," by John Ford (as I love all his work).

For me more Ford and fewer Peregrines would be perfect, and you at *IA'sfm* should know that that is how I feel. For stating this I should not have Harlan Ellison out to kill me. I am sure Mr. Davidson will have no serious mental problems because I didn't like his story, nor will Mr. Ford have a Napoleonic Complex because I enjoyed his work. But, *IA'sfm* will, for me, become a better magazine (with maybe even a better letters section).

Hope I haven't offended anyone,

John Meier
2845 W Bryant Pl
Littleton CO 80120

Every one of us would be in trouble if our humorous remarks were accepted literally. Avram has a sardonic sense of humor, that's all. Besides, Harlan is no killer; he would only maim you somewhat.

—Isaac Asimov

Dear Editor:

I would be quite grateful if you could pass on to the Good Doctor a few words that have acted as my motto for several years (and I have no doubt that it was he who inspired the attitudes that inspired the motto): "Modesty is for ordinary people." I give Dr. Asimov full permission to use the motto at appropriate occasions—as long as he gives me credit. Ah! anything for the public eye.

Thanks very much for the excellent magazine.

Sincerely,

Melissa S. Grier
Columbia Falls MT

Ah, but who is to decide who is ordinary and who is not? Personally, I think I am very ordinary, but I am snowed under by the large majority who oppose that view.

—Isaac Asimov

Dear Editor:

I have been a subscriber to *IA'sfm* for over two years, and my current subscription will run for another two years. Therefore, when I see something that I don't like, I think that I should write to you and tell you.

While I certainly agree that there is a place in a science fiction

magazine for nonfiction, I think that you have gone too far! I recently finished the September 28, 1981 issue, and the quantity of nonfiction material was discouraging. I am not against nonfiction in general—however, you are heading towards becoming a science fact magazine, and I am not pleased with this trend.

To see if I was overreacting, I looked at the oldest issue of IASFM I could find around the house (it was the August 1979 issue). Of its 192 pages, about 147 had fiction written on them (I didn't count pictures, but included poetry). For the September 28 issue, the numbers are 176 total pages and about 102 fiction pages. In two years, the percentage of fiction has decreased from 77 percent to 58 percent!!!

Does this mean that by 1983 you'll have only 40 percent fiction? I am quite concerned as I really enjoy your magazine—but I used to enjoy it a lot more!

Richard I. Smith
64 Arlington Court
Kensington, Ca. 94707

I don't think this is a general trend. The distribution of fiction and non-fiction fluctuates from issue to issue. We try to keep a balance that seems to us to be desirable.

—Isaac Asimov

Dear Editor:

I was very surprised and pleased when I read your editorial of November 23, 1981. Unlike the late, great John W. Campbell you seem to have avoided controversial subjects when writing editorials. However, I think if Mr. Campbell were still around today, he'd be applauding your last one.

A tide of ignorance has spread across the nation recently, and it has all been justified in the name of the Bible. These "scientific creationists" not only degrade the truths of science, but they also degrade the beauty of the Bible itself when they attempt to use it to serve their own private ends. I was very glad to see that someone had the courage to speak out against them. Your last editorial alone is enough to guarantee that I will continue to read your magazine as long as it is still printed—as if good stories and articles aren't enough.

Kerth Rixford Barker
St. Louis MO

No, no, I don't want anyone reading the magazine just because they agree with me, anymore than I want anyone not reading the magazine just because they disagree with me. Read the magazine because it is worth reading, and for no other reason. And stop reading it if it ceases to be worth reading.

—Isaac Asimov

Dear Editor:

I sincerely wish to compliment *Isaac Asimov's Science Fiction Magazine* for their great SCIENCE FICTION stories. It is truly the best science fiction magazine on the market today. Isaac Asimov is a great fiction writer whom I have admired since I was in my teens and it is with great regret that I ask to terminate my subscription. However, an editorial by Isaac Asimov, called "Watch Out," attacks my belief. Yes, I do believe that the Holy Bible according to the book of Genesis is the way that mankind came into existence. I wouldn't have minded his attack (and that's what it was), if it hadn't been so vicious. There are a couple of things about his editorial that I would like to point out.

Mr. Asimov would have the reader think that "real scientists" are only those who believe in evolution. Mr. Asimov also claims there is no evidence for the Biblical version. Well, Mr. Asimov, evolution is only a *theory* according to science books, dictionaries, and encyclopedias. I would have thought that a "real scientist" would have known that theory means an unproven assumption. Enough on that.

I noticed Mr. Asimov feels that it would be wrong to allow children in school to have a choice between the Biblical version and the evolution version. It seems Mr. Asimov thinks the religious groups would go so far as to eliminate the teaching of evolution. But at the same time, Mr. Asimov does not want the Biblical version of creation even taught in the schools. Mr. Asimov doesn't want to give the children, parents, and teachers a choice. It seems Mr. Asimov has forgotten that the United States of America was built upon the precepts of freedom of choice.

Mr. Asimov also gives a flimsy reason for not allowing the Biblical version of creation to be taught. He says that all religious creation "myths" would have to be taught. Not so! As many people, if not more, believe in the Holy Bible's version of creation than believe in the evolution theory. So why shouldn't the majority of the populace have their version taught in the schools?

Mr. Asimov leads us to believe that evolution is taught *only* in

schools and that the theory cannot be obtained anywhere else. The evolution theory is taught and information made available in museums and libraries.

Again, I regret the termination of my subscription, but Mr. Asimov's editorial went to an extreme that cannot be justified. Mr. Asimov is great in his field, but I feel that he has overstepped his area of authority. Hopefully, Mr. Asimov will re-read his editorial and realize that his viewpoint was awfully harsh.

Sincerely,

Frederick G. Marsh, Jr.
Alamogordo NM

A theory is not "an unproven assumption." When you say that, you display ignorance of what science is. It is not the business of politicians to enforce their notion of "free choice" on the schools. If they can do that, why don't they enforce it on churches, and force your church to give its parishioners a free choice by teaching evolution along with creationism?

—Isaac Asimov

NEXT ISSUE

In the July 1982 issue of *Isaac Asimov's Science Fiction Magazine* you'll begin to see some of the exciting new features we have in store for you. For instance, we'll be running a regular series of profiles of people connected to the field. Our first installment will be a profile of futurist Alvin Toffler, written by Charles Platt, author of the Hugo-nominated collection of profiles, *Dream Makers*. We'll also be doing our best in future issues to bring you the newest work from the Big Name writers. We'll be kicking off this policy in the July issue with brand-new stories from Isaac Asimov and Gregory Benford. In future issues we'll be presenting such luminaries as Brian Aldiss, John Brunner, Larry Niven, and more. And don't forget that the Good Doctor's new "Foundation" book is coming out soon, too. You'll be hearing much more about it here, soon. You'll also see a new regular feature starting in the July issue: a cartoon by humor-illustrator Gerry Mooney. It'll be called "Mooney's Module," and we think you'll enjoy it. So get ready for the new *Asimov's*. On sale June 8, 1982.

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